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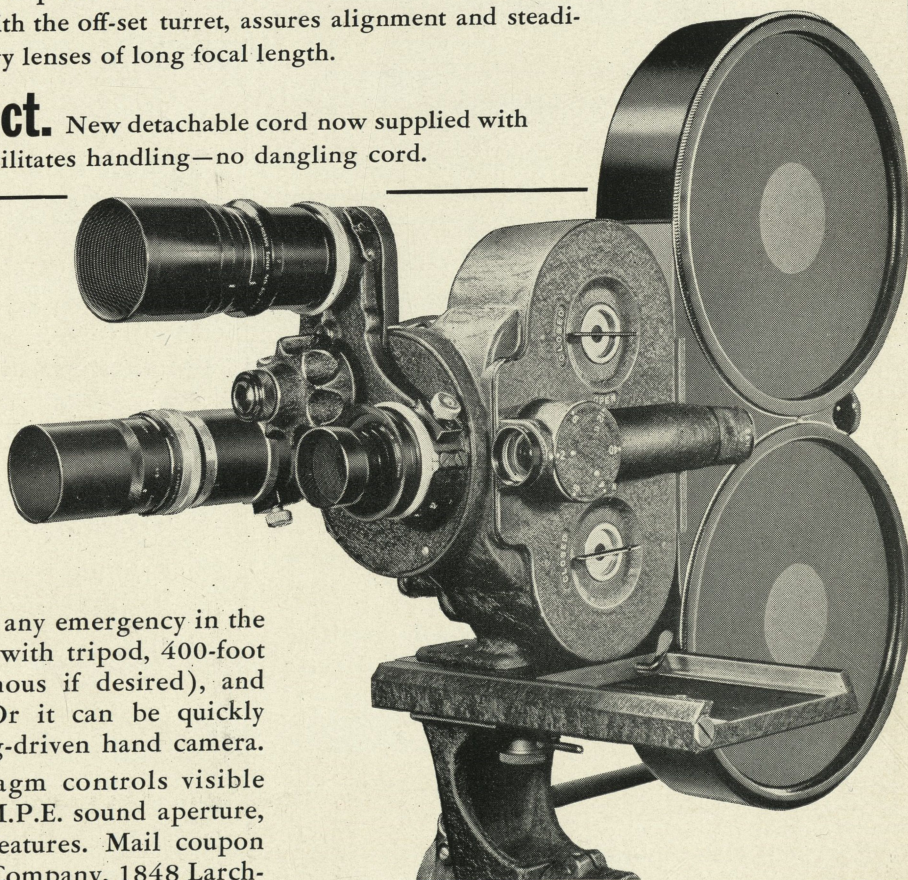
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## Front Cover

ON a Warner Brothers set are shown crew and players of what now is rated as one of the more important pictures of the year, "The Lady and the Knight." Bette Davis and Errol Flynn sustain the parts of Queen Elizabeth and Lord Essex. Miss Davis is shown in left centre talking to Director Michael Curtiz.

In the front is Sol Polito, A.S.C., director of photography, standing just below Curtiz. At the extreme left and facing Polito is W. Howard Greene, A.S.C., specialist in Technicolor.



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# DOCUMENTARY No. 1

**T**HIS has been a great month for the historical in motion pictures. The March of Time has come through with "The Movies March On," tracing the rise and development of the picture industry across forty and more years. On the screen it flashed for twenty minutes. It is an unusually interesting cross-section of what has been done by the film industry, but its magnitude is submerged in the much greater results secured by the industry itself in the making of "Land of Liberty."

In this production, running 2 hours and 15 minutes, 54 companies have contributed negative from 124 subjects covering a period of 25 years. In this instance the theme was not an industry but a nation, from its birth to the present day. Some of its more recent participants were shown in the flesh, so to speak, but of course the majority of the men and women were portrayed by players. Of these latter 128 are identified.

Beginning at the end of 1938 the picture was assembled and edited by a crew headed by Cecil B. DeMille. Assisting him were Herbert L. Moulton, William H. Pine and Francis S. Harmon. James T. Shotwell, distinguished Columbia professor, as consultant, made two trips to Hollywood, when the work was started and when the final assembling and editing was done. The narration was written by Jeanie MacPherson and Jesse L. Lasky, Jr.

The picture is in fourteen reels. Some conception of the labor connected with the welding of the material may be gathered from the fact that two million feet of film were examined. These figures do not include the vast amount of newsreel subjects that were put on the screen.

Replacement value of the scenes in the production is set at fifty million dollars. The number of persons appearing in the cavalcade has been "conservatively checked" at thirty thousand. After looking at "Land of Liberty" it is unlikely any one with picture experience will doubt the approximate accuracy of the estimate.

The picture opens with President Roosevelt at a microphone. He refers to America as the Land of Liberty, where the oppressed of other lands get their second chance. Colonial scenes follow, in some of the sequences of which Johnny Bull is not going to feel entirely pleased—but in which the asperities hardly could be softened in the interest of accuracy.

There are many thrills in "Land of Liberty" . . . not merely the ordinary thrills that accompany hazard of life or of limb, but those that respond to the utterances of great words in most dra-

By George Blaisdell

matic setting and also in what prove in later times to have been in great days.

One of the outstanding sequences is the singing of Paul Robeson as soloist and leader of the negro roustabouts in the river steamer scene from "Showboat."

The whole sequence is a triumph, as it must be to have stood out as it did when surrounded by so long an array of great events. It is a triumph, too, of recording and reproduction.

There is much in the fourteen thousand feet to afford opportunity for study—on a subsequent showing, of course; hardly on the first—of the progress of picturemaking. It is a history, too, of technique. The earlier scenes of the subject demonstrate the presence of the more primitive equipment, the progression of the camera, as it were, right up to the final achievements in color.

The more expert may detect advances in lighting, set designing, make-up and mechanical construction. It may be noted here that the entire production has been printed under uniform conditions of modern laboratory equipment and positive stock.

The picture is one that reflects abundant credit on those having to do with its selection and polishing, mechanical and literary. So it is to be regretted, all the more, that the presentation suffers from the abomination of dual commentary.

It is a maxim as old as the stage itself that to break illusion is unthinkable; that it is not theatre.

Carrying out the obsession of immaturity that the commentator must put hysteria and panic into his voice in order to put thrill into his listener, followed by the practice of employing alternating commentators striving one to outdo the other on news programs, rather than a single commentator with steady and unexcited but appealing tone, much of "Land of Liberty" was made vocal by the employment of two men, each speaking briefly.

While in the present instance there is no charge of hysteria or panic, nevertheless the auditor is unable to get under the spell or illusion of a sequence before with a jolt administered by a change in voice he again is brought to a realization that he is in a theatre after all and that what he is gazing on and what he is listening to is not a bit of life. It is just what the children describe as play-acting.

The voice of the commentator—and only one commentator—should possess the subtle quality that rides in the ideal music of the scorer. The auditor

should sense it and absorb it. But he should be unconscious of it.

"Land of Liberty" deserved all of that.  
\* \* \*

But of course there's no one person sees both sides of the shield. Undoubtedly that is the underlying principle of a publication when giving a reviewer two tickets in assigning him to cover a first night. It desires the benefit of the restraint that goes with companionship, the subtle restraint if you will, and the unconscious influence of the feminine viewpoint in tempering that of the unwittingly hardboiled masculine.

So this writer handed a proof of the foregoing remarks to the woman who for lo these many has prepared his breakfast and then had the patience to sit with him and share it. The woman, it may be said, is a born and reared New Yorker, whose early admiration for the stage has never been quite displaced by the screen.

"I think you're wrong," was the comment as the proof was passed back. "The illusion was complete for me. In the past twenty-five or thirty years I have seen with you a great majority of the great pictures you have seen. I am sure none of these has thrilled me as did 'Land of Liberty.'"

"It thrilled me because for perhaps the first time in my life it gave me a fuller realization of what it means to be an American—it brought home to me as never before how precious a privilege and what a great honor it is . . . and how proud I am . . . to be an American!"

**A**T the Newsreel Theatre in Hollywood this month I was privileged to see Columbia's short, "A Man Made Island." It is a story of the San Francisco Fair. It was photographed in color by Frank B. Good, at the time of his sudden death in May the secretary-treasurer of the A. S. C. Undoubtedly it was the last work done by Frank Good—and it was well done.

**H**OLLYWOOD was a month ago given an opportunity to look on "The City," an American documentary film of four reels—and probably in many respects the most pretentious of any American documentary subject to date. It is being shown regularly at the World's Fair in New York. Seen there by Walter Wanger, and quite naturally admired, he laid plans to have a print brought to the West Coast and shown here.

The subject was from an outline by Pare Lorentz and a scenario of Henwar Rodakiewicz. It was photographed and directed by Ralph Steiner and Willard Van Dyke, assisted by several others. Thirty-six locations are listed, and they range from New England and New York



to Los Angeles and to London and other points in England.

The production was made possible by a grant from the Carnegie Corporation of New York, the film being divided as follows: "In the Beginning" (New England); "The Industrial City," "Men Into Steel" (the metropolis); "The Endless City" (the highway) and "The Green City."

The theme was how to build a city and make it livable—to eliminate slums and to bring living conditions to those who were slated to do the rough work of the world. Much was shown of the work that has been done toward making the world a better place in which to live; enough was shown to remind of what has been suffered and is being suffered where the slum clearances have not yet been effective.

A couple of thoughts crowded to the top while we were looking on scenes of alternating squalor and parklike back-grounds, the old way and the new way: "The City" was made possible through the sponsorship of the Carnegie Foundation, provision for which was made by the late Andrew Carnegie, a most praiseworthy act. It will go far to remove the grudge that may have existed in many long memories over the occurrences that piled up at Homestead at the time of the tragedy in that town—at a period when slums were known and only known and homes in milltowns with parklike back-grounds were undreamed of.

There is another thought: Giving Hollywood first-class contact with a picture that is founded on fact and not on love interest as that love interest appeals to Hollywood. Could it be possible this may have been what was in the back of Walter Wanger's mind?

Nevertheless Hollywood is going a distance in this same field, that of the documentary. But it is in the field of the shorts, just now in a sort of eclipse, due to the double feature.

When programs get back, if they do get back, on a basis of one feature and several shorts, then will arrive the day of the documentary on the theatrical screen.

EDWARD ELLIS in the leading part of RKO-Radio's "Career" makes a mighty bid for the added regard of picturegoers. It is reminiscent of the same man's success in "A Man to Remember," produced within the last year or so by the same company. Temptation always is strong to declare the more recent of two productions outweighs the other. There is no doubt in the mind of this reporter that that is true in the present case, true by reason of the belief that Ellis's part in "Career" is the more powerful drama. And that is a strong statement.

The story is a simple one of a small town in Iowa, peopled by just folks and minus men or women of real wealth or self-exalted position. It may be after all the story was not so simple. It begins a generation before the formal opening—

when a "smart" man of the village wins in marriage the hand of a woman sought by another, less smart but steadygoing and honest. Although the woman has died she lives on in the homes of the two men, openly in one, unmentioned but nevertheless poignantly present in the other.

It is around this woman of whom not even a photograph is shown that the story rises to unusual heights, with the chill of stark melodrama alternating with scenes of deeply moving tragedy. The makers of the production have the courage to give it an unhappy ending or at least minus a hundred percent happy ending, which is much nearer to life in the raw than we usually find it on the screen.

Janet Beecher portrays the character of the woman who accepts the man who was defeated a generation before. She is the mother whose son in the end is rejected by the daughter of the woman now dead. She is an accidental listener to the conversation between the father and the son following the rejection, a talk in which for the first time the mother learns where she stands and where she has stood for a quarter century in the affections of the father.

The sequence will serve for a model in writing, direction, interpretation and presentation on the screen.

Frank Redman, A.S.C., photographed,

## Glennon Wins Again

FOR the second time within four months Bert Glennon, A.S.C., was accorded photographic honors for June by the Hollywood Reporters poll. The production was Twentieth Century-Fox's "Young Mr. Lincoln." Its predecessor was Walter Wanger's "Stagecoach," which took the nod in March.

The photographic strength of the picture grips in the opening sequences. One is where Fonda as the young Lincoln walks with Ann Rutledge along the shores of a river. The walk is unhurried, giving the spectator an opportunity to drink in the charm and the beauty of the scene. It impresses the reviewer—it accomplishes what it is no simple matter to do: to notify the observer that here is photography out of the ordinary.

There are outstanding shots that steadily follow through the picture, with another unusual one at the finish.

Four other awards went along with Glennon's. One was for the best picture, Director John Ford got another; Henry Fonda, who played the title part, was given his, and Alice Brady was awarded another for the best performance by a supporting actress.

and Vernon L. Walker, A.S.C., was responsible for the special effects. John L. Cass recorded. Phil Stong's novel was adapted by Bert Granet, with the screen play written by Dalton Trumbo. Leigh Jason directed: a craftsmanlike job.

THE motion picture of today has been more than forty years in the making. In "The Movies March On" (March of Time, Issue 12 of Volume 5), is shown the inception and the gradual development of what in the beginning was not taken overseriously. To all who admire screen fare there will be interest in this number—rising in rapidly increasing degree according to the period of time that may be carried in the memory of the observer.

The historical review is made possible through the assistance of the Museum of Modern Art, the home of which is at 11 West Fifty-third street, New York. This new institution has been made possible through its founding in 1935 by the Rockefeller Foundation and by the help since accorded its Film Library by the motion picture industry as a whole.

In the library's vaults are millions of feet of film, news reels and features ranging in length from the early single reelers to the present day features. In the beginning the length may have been fifty feet or even less. This writer recalls in 1915 in San Francisco being shown an old-time ledger by a veteran exchange man in which any part of ten or a dozen subjects were included in a single reel.

The number under discussion makes an early start. It begins with May Irwin and John C. Rice in "The Kiss" of 1896. It was shown in vaudeville. There were no picture houses at that time. To say that it made a sensation is expressing a situation mildly. In New York it was town talk, and in the comparatively few places that also saw the relatively hot number it also must have done the same. The germ of censorship was planted at that time.

Much water went under the bridges in the following seven years, but the next picture was of the vintage of 1903, "The Great Train Robbery," by Edison, directed by Ed Porter. The next jump was of nine years. It is of a still of Mary Pickford and Lionel Barrymore and a hat, with the year of 1912. That must have been "The New York Hat." Later we see Valentino, a fine picture of that young man, splendidly photographed and the film in excellent condition. That was "The Four Horsemen."

Then the films and the players come fast. The players shown are among others William S. Hart, Charlie Chaplin, Ben Turpin, Marie Dressler, Mabel Normand, Lillian Gish, Theda Bara, Douglas Fairbanks, Greta Garbo, John Gilbert, Renee Adoree, Al Jolson in one of the first sound pictures, Will Rogers and Paul Muni.

The editors have selected for "The Big Parade" a sequence which for downright melodramatic power always has remained

(Continued on Page 382)



# White Border Screen?

**D**URING the recent convention of the Society of Motion Pictures Engineers a most interesting suggestion—revolutionary if it should become accepted—was made by John G. Capstaff of the Kodak Research Laboratories. Briefly, it was that an illuminated white border be substituted for the conventional black border around projection screens.

According to Capstaff, such a practice would give the projected picture better and more convincing tonal values. Under present conditions, he points out, it is difficult to make low-key scenes, and particularly night effects, convincing on the screen.

This is due to the fact that the darkest shadow area reproduced on the screen, even though it represents the maximum density obtainable in the positive print, is still not perfectly opaque. Some light

is transmitted, and in addition the screen in most theatres will also reflect at least a small amount of light from the lamps illuminating the auditorium.

In direct contrast to this is the almost perfect light-absorption of the black velvet border surrounding the screen. Compared to this, the blackest shadow obtainable on the screen must necessarily appear grayish and relatively luminous.

This would not be the case when an illuminated white border is used. The border, he points out, should not be illuminated brightly in relation to the clear or highlight areas of the projected picture, but only to such an ex-

tent that the border will appear slightly lighter than the darker shadows of a normal picture.

## Darkens Deep Tones

In practice, he states, relative brightness of sixty to one seems best for monochrome, and thirty to one for natural-color projection.

This lighter border has the effect of apparently darkening the deepest tones of the projected picture, as they become the darkest area scanned by the eye of a person watching the screen.

To demonstrate this theory, Capstaff projected several reels of black-and-white and color film, including toned monochrome scenes, at the Chinese theatre in Hollywood. Reels from such productions as "Hound of the Baskervilles," "Ice Follies," "Dodge City" and a Walt Disney cartoon were projected with a luminous screen border, which in

*A low-key scene from "Hound of the Baskervilles" with a white border similar to that suggested by Capstaff. Illuminated border used in actual demonstration was somewhat grayer than this illustration appears.*





this case was switched on and off several times in each reel, to furnish a direct comparison of the effect of the dark and light screen borders.

The first impression gained from this new technique may be compared to that of looking at a painting in a wide gilt frame. This viewer, at least, found himself subconsciously looking for the scroll-work design of an old-fashioned picture frame.

However, this impression passed after a few minutes, as both mind and eyes became accustomed to the novelty of the light border. It is distinctly unfortunate, however, that Capstaff did not find it possible to present a complete production by this method, so that those present could determine more accurately whether or not the illuminated border distracted their attention from following story continuity.

As it was, presenting comparatively brief excerpts from several productions, and with the added necessity for switching the border illumination on and off several times during a reel or sequence, for purposes of comparison, this could not be judged with any accuracy.

#### Border Unnoted

In response to questions on this point, however, Capstaff stated that in tests made at the Kodak laboratory in Rochester, and in the Eastman Theatre in the same city, where a complete program was presented with the illuminated border, the average viewer was so completely unconscious of the border that, when questioned, most of them would ask, "What border?"

Technicians, he said, after the first surprise at the reversal of conventional practice, generally expressed themselves favorably, increasingly so as they became more accustomed to the effect.

Actually, he said, a very narrow black border is interposed between the picture and the illuminated border, simply to "clean up" the projected aperture. This consists of a rectangular frame of narrow black velvet, apparently two or three inches wide for the 24-foot picture shown at the Chinese. During projection it is imperceptible.

The Chinese theatre has an unusually large proscenium, and a screen somewhat larger than that used for the grandeur pictures of a few years ago was employed. The actual projected picture was over 24 feet wide; at least as large, if not actually larger, than the picture normally projected in this theatre. Yet the effect first gained from the relatively broad, luminous border was that of a picture smaller than usual.

#### Border Matte as Slide

The mechanics of the system are simple. The border is produced by projecting a stereopticon slide in which the center or picture area is matted out, while the edges remain clear. The matted area is of course matched to the area covered by the motion picture projector, so that the picture is projected

on a portion of the screen upon which no other light falls.

The slide used in the experiment was made very simply by using the stereopticon projector as a camera, and photographing the rectangle of light projected on the screen by one of the projectors, running of course, with no film in it. The resulting negative was then bound as a slide and furnished the necessary matte for border projection.

The intensity of the border could be controlled by raising or lowering the intensity of the stereopticon projection lamp. The narrow black border was easily applied by fastening the black velvet ribbon to the screen, utilizing the perforations in the sound screen, so that no permanent change was made in the screen itself.

In response to further questions, Capstaff stated that he had experimented with the use of colored illumination for the borders, for both monochrome and color.

There was no advantage from using

colored light to border monochrome pictures, and a definite disadvantage in using it for colored pictures, as changes in the color scheme of the projected scene might bring sudden and undesirable color conflicts between picture and border. White light, of relatively low intensity, he said, had been found best.

He also mentioned that the idea had found such acceptance with the photographic and color technicians at the Kodak Park laboratories that several had adopted it for use in review rooms and in home projection of 16mm. and 8mm. home movies and minicam slides.

The demonstration given, he pointed out, was strictly a private exposition of his own ideas, and should not be interpreted as an official demonstration or recommendation by either the Eastman Kodak Company or the Society of Motion Picture Engineers, but instead as an individual's experiment presented at a time when he could easily obtain the reactions of a group of the world's leading motion picture technicians.

## JOHN BOYLE ON LONG MOTOR TREK OVERSEA

JOHN W. BOYLE, A.S.C., is away on a long trek. He sailed from New York June 21 as a member of the Trans-Asia Inc. expedition, at the head of which is Lawrence C. Thaw, one who when not on exploration bent is a stock broker in New York. In the company also is Mrs. Thaw, as well as an M. I. T. man who will function as radio engineer and consultant in the many difficulties that may arise. There will be a crew of six men.

Thaw is an experienced traveler. In fact, it was at the head of a large expedition in Africa that he and Boyle first met, the latter at the time being at the head of a camera crew for an English studio troupe making a picture in the Dark Continent.

The unit consists of a trailer specially built by General Motors at a cost of \$80,000. It is air-conditioned and has specially designed generators and lights. There are two Chevrolet trucks. One mobile unit has a two-way short wave radio by means of which conversation may be maintained up to a distance of eighty miles. Then there will be a Buick sedan with a special trailer.

The itinerary includes New York to Paris, through France, Germany, Austria, Czecho-Slovakia, Roumania, Turkey, Afghanistan, Persia, India, the Himalayas, and thence to Bombay. It was planned at the beginning of the trip to dispose of the equipment on arrival at Bombay and to fly to London, from which point steamer would be taken for New York.

According to the itinerary, the party will be seven or eight months on the trip. Many supplies will be carried from the start, while others will be picked up en route. It will be this way with film, of which a hundred thousand feet of Eastman has been tentatively set for exposure. Already planned for use will be Plux X, Background X, Super XX and Zelcras bipack.

Exposed film will be handled in New York and Hollywood. As it is ready for shipment the black and white will be airmailed to New York and the color to Hollywood.

Camera equipment will consist of two Mitchells designed for black and white and for bipack, with an Akeley and two Eyemos. Of still cameras there will be four Contax and two Graflex. There will be a half dozen light meters, divided between Weston and General Electric.

Rather an extensive motion picture program has been outlined. Several contracts have been executed for commercial shorts, among these being from Standard Oil, Eastman Kodak, Union Carbide, Ethyl Corporation and others. Then there will be commercial shorts as well as the securing of background shots for studios.

En route the members of the company will be guests of prominent men in many countries. Mrs. Thaw does not intend so far as she is concerned the trek will consist of any picnic. She plans to carry out her usual practice of taking care of scripts and helping on story work.



# HOLLYWOOD FORUM HAS BUSY FIFTH ANNUAL

**T**HE fifth annual educational conference of the Hollywood Motion Picture Forum was held July 14 and 15. It exceeded in attendance and general interest all of its predecessors. The conference headquarters and registration were at the new Review Theatre, 1455 Gordon street, Hollywood, which is under the control of the Academy of Motion Picture Arts and Sciences.

The sessions covered three days and two nights. The top note was sounded on Saturday night at the Victor Hugo Cafe, Beverly Hills, the occasion being the annual dinner. Vincent P. Maher, deputy superintendent of Los Angeles schools was master of ceremonies. Vierling Kersey, superintendent of Los Angeles schools, was the speaker of the evening and added to the prestige he established at the parallel occasion a year ago.

Other speakers who were closely followed were Don Gledhill, executive secretary of the Academy, and Marie Seton of England, an authority on documentary films.

## Novel Pre-Conference

On July 12 under the auspices of the Motion Picture Producers and Distributors and as a compliment to members of the Forum, there was a pre-conference studio-theatre program at Warner Brothers Hollywood theatre. Max Steiner demonstrated the scoring of motion pictures in a fashion never attempted before.

As an example, there was thrown on the screen the final sequence of Bette Davis in Warners' "Dark Victory." It was shown without sound or music. Then the same scene was shown with sound but without music. Then finally it was put on the screen in the same fashion as formally in the theatre.

The same routine was then followed with "Dodge City." The object was to show to the audience several things. One perhaps was to illustrate the barrenness of the performance without the accompaniments of the additions that have been made to the screen performances of the past ten years. Another was to demonstrate what the musicians faced when the picture was sometimes without warning placed in their laps

and they were informed as to the number of hours they would be allowed before the picture was to be handed back.

Another was to indicate how the musicians plodded until they identified the tempo of the subject. A striking example of this was the burning train in "Dodge City" and the demonstration of the musicians' achievements in "fitting" the music to the rapidly moving events.

## Audience Sits Tight

The audience remained in its seats for over two hours and it was entertained every minute. So far as known it was the first time such a demonstration had been given. It proved to be one of the highlights of the conference.

Approximately thirty pictures were shown during the conference. Projections were held at the Academy Theatre in North Gordon street, at the auditorium of Electrical Research Products, Inc., 6601 Romaine street; Bell & Howell Studio, 716 La Brea North avenue, and at the restaurant on Saturday evening.

Among the pictures shown were:

Friday, July 14—"How Motion Pictures Move and Talk," Filmosound Library; "The Sea," Horace and Stacy Woodard; "The Truck Farmer," ERPI Classroom Film; "Marshland Mysteries," Robert Unseld, Bell & Howell Film, first release. Eastman Kodachrome process print.

Discussion Leader: Cline M. Koon, U.S.C. Instructor, Visual Education. Senior Film Specialist, U. S. Office of Education.

Auditorium of Electrical Research Products, Inc., 6601 Romaine street, corner Seward, in measuring devices, illustrations of control techniques in sound recording, and screening of film to show most recent studio sound recording technique. Presentation by Clifford W. Smith, vice president, ERPI.

"Hunting Walrus," B & H Lecture Film, Commander MacMillan; "Electrostatics," ERPI Classroom Film; "Statue Parade," English Documentary Film, Paul Burnford, Strand Films, London; "People of Mexico," ERPI Classroom Film; "Modern Electric Brooding," Ellis

Yarnell for Southern California Edison Company; first release Kodachrome sound print.

Discussion Leader: Dr. V. C. Aranspeiger, ERPI Picture Consultants, New York.

"Death Valley," Color-Sound Film by Jay Dresser; "Nine Days a Queen," Gaumont-British Production; "King George and Queen Elizabeth in the United States," Castle Film; "Cartoonland Mysteries," how cartoons are made, Universal; "The River," United States Government documentary film.

Discussion Leader: Dr. Wm. J. Klopp, supervisor of secondary education, Long Beach city schools.

## Film Clinic

Saturday, July 15—"Safeguarding Health at Nation's Gateway," Frith Films, Hollywood; "Agricultural Ants," Stacy and Horace Woodard, Hollywood; "Metal Crafts," ERPI Classroom Film; "California Wild Flowers," Color, Howard Jones; "Clocks and Time Pieces," Fred W. Orth.

Discussion Leader: Fred W. Orth, Instructor Visual Education, U.C.L.A.

"Think!" Junior High Production, Dr. Helen Clifford, Long Beach; "Balinese Dancing" (Oriental Journeys) Harriett Huntington; "Congo Curiosities," Paul Hoefler, explorer-producer; "Free to Roam," Paul Burnford, Strand Films, London; "Mexico," Miss Marie Seton, editing of excerpts from Eisenstein Documentary.

Discussion Leader: Wm. F. Kruse, Director of Films Division, Bell & Howell Company, Chicago, Ill.

Excerpts from "The Great Commandment," Cathedral Films, Rev. James D. Friedrich. "Colorful Latin America" excerpt, Capt. G. Allan Hancock. (Narration by Granville Ashcraft, Research Associate, Allan Hancock Foundation, U.S.C.); "Majesty of Alaska," Infra-red cinematography, Father Bernard Hubbard, courtesy of Wilson Leahy, Agfa Film. March of Time excerpts, "International Munitions Ring" and "Ghost Town Saves Itself," Initial 16mm. release, courtesy of Boyd Rakestraw, University of California, Extension Division, Department of Visual Education. Disney Color Cartoon, "Pied Piper of Hamelin," 16mm. print, courtesy of Donald Reed, Ideal Pictures Corporation.

One of the unannounced pictures that made a hit with two audiences was "Adventures of Chico," film in sound and running 60 minutes. It was produced and directed by Horace and Stacey Woodard. Another subject that was rare in character was Father Hubbard's most aptly named "Majesty of Alaska." Exposed on infra-red film, the photography was in a class by itself. The film brought out all the majesty of Alaska.

The sessions were called to order by President Bruce A. Findlay. They were closed by the newly elected executive, Fred W. Orth, instructor visual education, U.C.L.A.



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Is Bound To Be*

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PLUS X  
PANCHROMATIC  
NEGATIVE**

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# DEBRIE BUILDING RUGGED 16mm. REDUCTION PRINTER

By R. FAWN MITCHELL

*Manager, Andre Debie Inc. of America.*

AS IS well known, the use of 16mm. film for industrial and educational purposes has increased with extreme rapidity, especially in the last few years. Today there is hardly a large school, church or business meeting which does not have its 16mm. movie show with more or less regularity.

Some idea as to the extent of industrial use of 16mm. can be gathered by the increasing number of concerns producing pictures for such purposes. It is self-evident that the rapid growth in the use of such film necessarily imposes problems in the laboratory where such films are processed.

In general it is the accepted practice to photograph original subjects on 35mm. film and print them by optical reduction on to 16mm. Not only does this give a decided gain in quality, but it also permits 35mm. prints being made in the regular manner if and when desired.

## Accelerating Speed

An additional factor to be considered by the laboratory is the growing extent to which regular theatrical productions are being printed by optical reduction on to 16mm. for library purposes. Historical films, particularly selected excerpts thereof, have been found of great value in the educational field. It is obvious that such applications are going to increase even more in the future.

Because of the physical dimensions of the 35mm. and 16mm. apertures with respect to the overall dimensions of these respective films it is possible to print 35mm. pictures by optical reduction only by means of a step type printer.

*One of several typical Debie installations in this country.*

Up to now the average speed of a step printer and particularly a step reduction printer has not usually been greater than 30 or 40 feet a minute (on the 35mm. side).

This, naturally, is considered too slow in comparison with the speed at which modern 35mm. printers normally operate. It can be seen, therefore, that unless some adequate means of increasing the effective printing output of the reduction printers used in the laboratories is available this speed limitation would prove a "bottle neck" in the ultimate set up.

For some time now the internationally known "Etablissements André Debie" of Paris have given extended consideration of this problem particularly as its worldwide affiliations brought it into touch with the growth of 16mm. reduction printing in many scattered countries of the world.

The company has designed and built

a very rugged and precise reduction printer of outstanding qualifications. This printer is made so ruggedly that it has been found entirely satisfactory to operate it at a speed of 64 feet a minute (on the 35mm. side).

## Output Doubled

In addition to this a recently improved achromatic beam splitter is incorporated in the design. This beam splitting optical unit is designed to produce two absolutely identical 16mm. prints in one operation from a single 35mm. negative so that the effective output of the printer is doubled.

Considering that the printer is running very much faster than any known equivalent apparatus available, the total effective output of approximately 128 feet a minute, figuring equivalent in 35mm. footage, is a remarkable gain when compared to the normal 30 or 40 feet a minute output of printers heretofore employed.

In addition to turning out this vastly increased output every precaution has been taken to insure there being no loss of quality. One of the main reasons why such extreme quality is obtainable despite the gain in output is due to the use of a combination gate releasing mechanism and pilot pins.

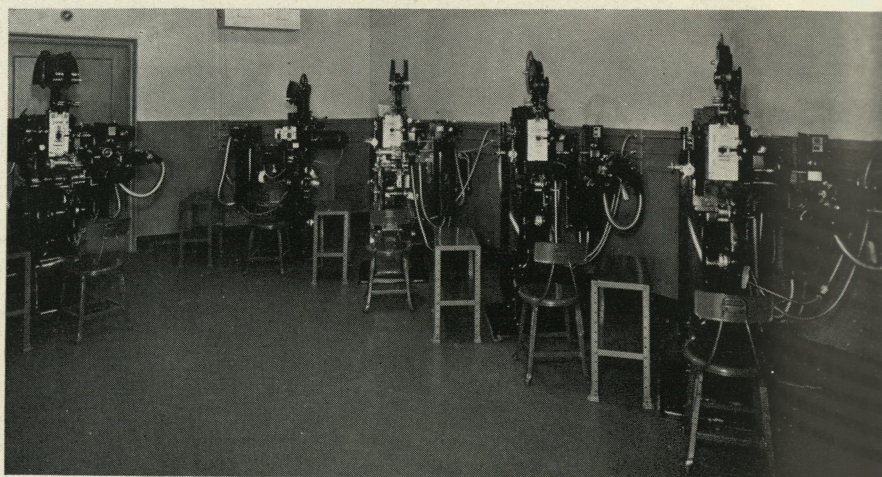
The printer is normally equipped so that the pressure gates of both the 35mm. and 16mm. heads are retracted during the time the film is being moved past the aperture; these gates, however, close during the printing portion of the cycle to insure that all films are in perfect contact with their respective aperture plates.

For a nominal extra cost the printer can be equipped with pilot pin registration on both 35mm. and 16mm. heads.

## Can Be Made Adjustable

A unique feature of the Debie pilot pin mechanism is that it can be made adjustable. In other words the 35mm. pilot mechanism can be made to move slightly up or down to compensate for any range of negative shrinkage normally encountered.

The adjustable pilot pin feature and the newly developed achromatic beam





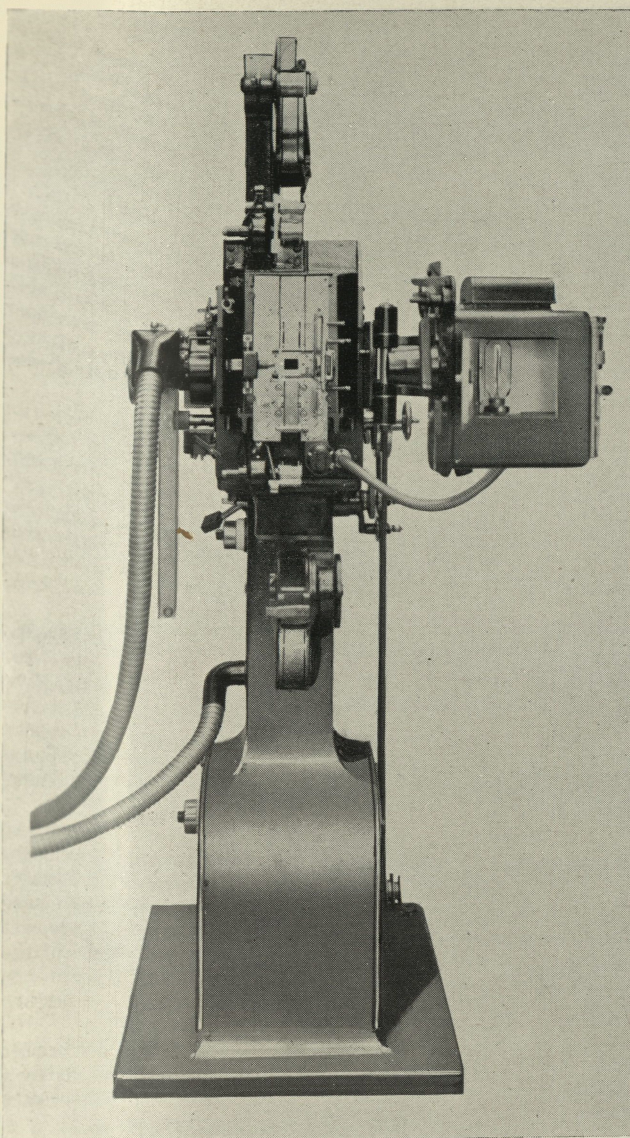


Figure 1. Debie 35mm.-16mm. picture reduction printer showing 35mm. negative side, with lamphouse door opened to show lamp. The lamphouse is equipped with a safety red glass mechanically interlocked with handle so no white light can escape when lamphouse is swung around for threading. Part of optional contact unit for Debie automatic light change is shown at left.

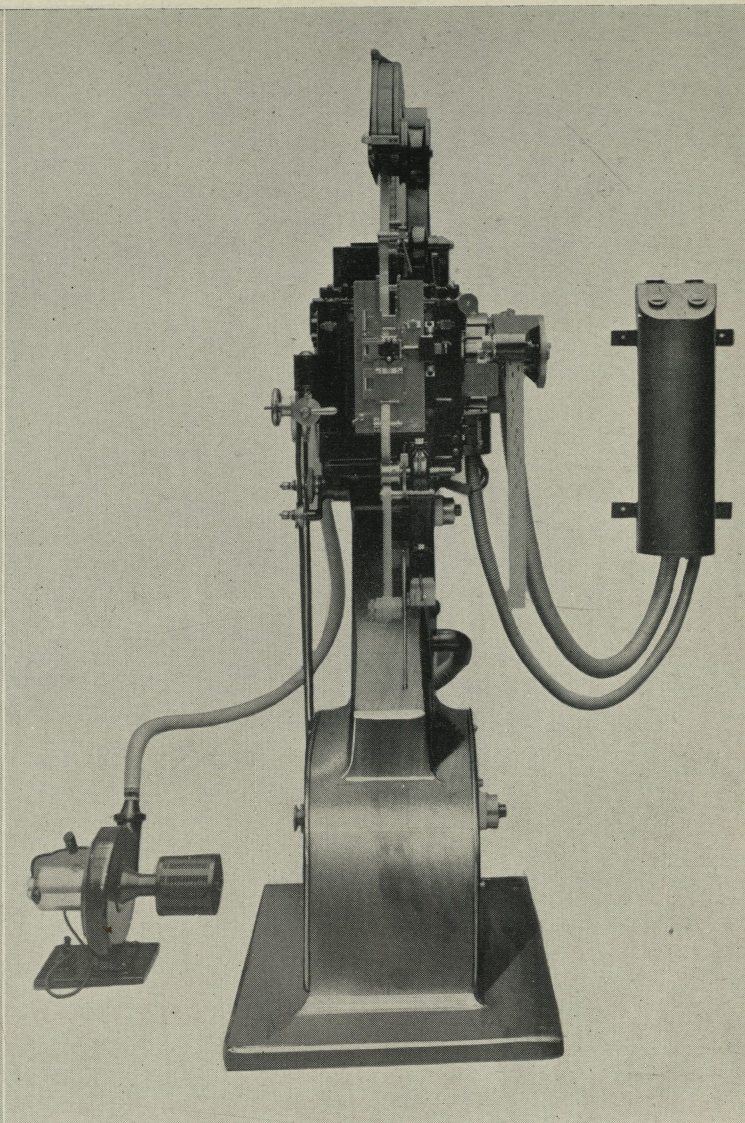


Figure 2. Debie 35mm.-16mm. picture reduction printer showing machine threaded with only one 16mm. strip. (Either one or two 16mm. positives can be printed at one time as required.) This illustration shows the optional Debie automatic light change unit (at right), and also shows the blower removed from base and cover removed from belt to show method of drive from motor in base.

splitting unit is attracting considerable attention in connection with the possibilities of reducing color films to 16mm. on an economical laboratory basis.

Ordinarily, the adjustable feature on the pilot is not recommended for the 16mm. head because positive stock has been so standardized that fixed pilots are all that are needed.

Among the other features of this printer may be noted the ease with which the 35mm. and 16mm. apertures plates and gates may be removed from the main housing to offer convenient access to the mechanism. Also the entire top of the printer can be removed to allow convenient access to the optical unit,

should that be desired at any time. Another good feature of the new printer is the manner in which the main driving motor is mounted in the inclosed base. In this base is also mounted a little motor driven blower with an integral air filter which provides an adequate supply of air to cool the lamphouse and also to blow against the 35mm. aperture to remove any dust that might accumulate there.

#### Resistance Type Favored

While this printer can be equipped with a special automatic light change designed for the making of a large number of prints from one negative, the preference of most users, in this country at least, seems to be toward the use of the conventional and familiar resistance type of light change board. These boards are operated from standard notches in the negative.

If necessary, the printers can be equipped with the contact boxes in a different position to take care of negative notches made for any other system.

Already these printers have found application in several of the big laboratories in this country and it is believed that the unusual features incorporated in the design together with the combination of quality and production of their performance make this printer one of the major pieces of equipment available to the modern 16mm. laboratory.

The Debie line, in general, is most comprehensive and includes over a dozen types of developing machines and more than twenty kinds of printers for any conceivable purpose. Of the special printers the superimposed title, bi-pack and Dufaycolor printers are the better known.



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# PROVED DEPENDABLE

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THE proving period for Eastman's new negative films has been left far behind. With their special emulsion qualities reinforced by typical Kodak dependability, *Plus-X*, *Super-XX*, and *Background-X* are firmly established as successors to other notable Eastman films for the motion picture industry. Eastman Kodak Company, Rochester, N. Y. (J. E. Brulatour, Inc., Distributors, Fort Lee, Chicago, Hollywood.)

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## EASTMAN

### PLUS-X

*for general studio use*

### SUPER-XX

*for all difficult shots*

### BACKGROUND-X

*for backgrounds and general exterior work*



# PLAN FOR FILM WHEN FAMILY TRAVELS

By JAMES A. SHERLOCK  
Sydney, Australia

## Article Three



*The still camera caught a tense moment approaching.*

**F**AMILY films can be made interesting if a little planning is done. With this type of film it pays to go to the trouble of writing a little scenario or story of the particular phase of family life that is to be recorded.

If the whole family go into conference and discuss this matter the cameraman can be sure of individual support from the various members of the family. In fact they can easily become as enthusiastic as the cameraman if they are consulted beforehand.

Filming the new arrival is best started with a shot of a newspaper announcement of the birth, followed by mother and the infant in the hospital, a close-up of mother; one of the babe; then the babe being bathed and weighed.

### Don't Miss Birthdays

Do not use high powered lights on the infant; the diffused light from a window or verandah and a reflector together with a roll of fast film will do the job. If the mother is not well all this can be done at home later.

Let the cine camera record the life of a child in a candid manner, dirty hands, dirty face, it's first pair of rompers, it's first toy, but, most important, it's birthdays. There is no need to include titles such as—"Johnny at One Year Old." Each birthday cake with the lighted candles will be sufficient.

Photographing children is a job for one who likes them. Catch the child as it is learning to walk, with its little halting steps filmed from a very low camera angle.

If the child is hard to keep in the one place, set the camera up in the

shade and have a dish of water with a new bubble pipe and some soap on the set. When all is ready, and not till then, bring out the child.

If it is too young to use the pipe have an elder child blow the bubbles. This should be sufficient to hold the attention of any kiddie for a few minutes.

### Take in Whole Family

Of course Xmas is the best time to catch the child in a happy mood, but why not include the whole family in this film.

Commence with the preparations for the festivity, then the stockings being hung up, a clock showing the time to be 5 o'clock, a closeup of milk bottles being placed on a doorstep, then the children with their toys. From this on try to catch the atmosphere of the day as the family enjoy themselves.

Conclude the film with a child asleep in bed surrounded by a few toys. Fade out here. Again use plenty of closeups, little bare feet in the morning, the turkey (if any), Xmas pudding and soiled plates, all things that suggest the Xmas feeling.

### Plenty of Closeups

American Cinematographer from time to time publishes short scenarios which are easy to follow and may be used to feature the family in a film. After making one of these it will be found simple to write one yourself, but do not forget to consult the family beforehand and get all its members on your side.

If a holiday is to be filmed remember to shoot plenty of closeups so that the

film later may be edited as a continuous story. Start with a closeup of advertising folders of your holiday resort, bags being packed, luggage being loaded on the car, train or boat.

If the means of transport is a car, shoot a few feet of film showing the gas tank being filled at the service station, then a few feet of film showing the car moving off—this will suggest departure.

If it is a train or boat on which you are traveling, expose a few feet of film as the bags are being handled on the station or wharf. Then if it is a train shoot a yard of film as a similar train pulls out of your home town.

In the case of a boat be sure to get the name of the boat in a closeup, then people boarding the boat, then a few feet of film of your friends waving as the boat leaves the wharf.

When you get the habit of photographing such things as road signs (finger posts) names of railway stations, names on post offices, the front page of local newspapers, etc., you will find it an easy matter to edit your film in a story sequence that will be interesting with the addition of only a few titles.

Story value is just as important in an amateur film as it is in a professional short.

### Use Your Party

When filming the scenic portion try to include some persons in the foreground. If you are traveling with company have them walk into the scene, stop and look at the point of interest, then move out of the picture. When



they do this, photograph this object of interest.

When you edit this section you cut the film where they stop, add the scene you took without them, then join it to the frame where your friends commenced walking out of the picture. By this means you can include many closeups of your traveling friends, street scenes, buildings, statuary, streams, bridges, etc., in such a manner that each scene will be interesting.

Even a best friend will chafe at having to wait till a cameraman erects his tripod before taking a holiday shot.

Under these conditions the cameraman is advised to use any support he can find handy, the side of a tree, a post, a seat, a rail, the car, anything that is rigid will do. Do not wobble the camera while it is running or the background of your picture will be jumpy. It is very tempting to panoram.

If you cannot resist this temptation, move the camera very slowly and finish on the most interesting object, but when

possible avoid this technique, use a succession of shots taken with different lenses of the most interesting parts of the proposed panorama.

#### Photograph Natives

If you are visiting a foreign country be sure to include a few shots of local people at work and at play. Also any vehicles which seem strange to you. If people have gone out of their way to assist, leave them in a happy frame of mind so they will help the next cameraman that comes along.

Most architectural subjects are inclined to appear cold and uninteresting unless a good camera position is found. A branch of a tree, a doorway or arch can be used to frame the picture, thereby adding to its pictorial value; this may seem unnecessary to the beginner, but it increases the depth of the picture and makes for better picture composition.

Long shots are not as important as closeups where detail and texture is shown.

To increase the number of exposures taken, a rotating disc moving counter-clockwise is arranged in front of the rotating lenses. This subdivides one exposure into 2, 4 and 8 narrow strips and thus permits the increase of the number of exposures taken to a maximum of approximately 80,000 per second.

Pictures taken by a combination of the stroboscope and an ultra-microscope were shown at the exhibit that illustrated its uses for scientific and technical work, it was reported.

Among the pictures shown was the movement of warm air circulating in a heated room taken without the aid of smoke. This was done by means of the mirage effect of different temperature air strata.

The discharge of electric sparks over insulators and photographs of flying bullets hitting suspended steel wires were also shown. Pictures of flying bullets clearly showed the air waves in front of the bullet and the movement of the severed wire, according to the report.

## GERMAN CAMERA TAKES 80,000 SHOTS A SECOND

**A**N all-electric slow-motion camera capable of taking 80,000 pictures a second has been developed by a large German electrical manufacturing concern, according to a report to the Department of Commerce from the office of the American commercial attache at Berlin.

Motion pictures produced by the camera were recently exhibited in Berlin before a group of invited guests. Known technically as a "stroboscope," the

camera is designed primarily for technical and scientific research.

Although other methods in use take individual exposures at a faster rate, the new stroboscope actually takes many more exposures a second through the subdivision of each individual exposure.

The basic principle of this stroboscope is a disc of rotating lenses that eliminates the shutter. Exposures are actually made only in the status of "optical equilibrium."



### Movie Fax Now House Organ for Hollywoodland Studios

Hollywoodland Studios, South Gate, Cal., specializing in various types of film for the amateur movie fan, announce a gratifying acceptance of its house organ, the first issue having appeared in March of this year.

"We decided to produce a small house organ for the benefit of our mail customers," explained Ben Doty, owner of Hollywoodland Studios. "We captured the interest of our customers in offering sizable prizes for a permanent name of our house organ, which is 'Movie Fax,' it being suggested by L. J. Hark of Charleston, W. Va.

"Departments includes an informative front page of suggestions about making better amateur movies, Questions and Answers section; What's New section, special offers of merchandise, and monthly prize winning scenario. Interest in our amateur scenario division is growing. The publication is sent free of cost to all our mail customers."

### B & H Issues 100 Exclusive Copies of Monarch's Visit

A special 16mm. film presentation of the visit of Britain's King and Queen to America is being made available to only 100 persons throughout its worldwide distribution by Bell & Howell.

The three reels comprising this release contain the selected footage taken by ten cameramen at various stages of the journey. The films are mounted on three gilded reels contained in similarly gilded humidor cans. These, in turn, are housed in a library container.

*A rugged bit of Australian shore.*



# BEAUTY and REALISM in COLOR



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**SNOW WHITE  
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## REALISM in the STUDIO

Realism, the ever present aim of the studio, requires that all colors be recorded on the film in hues and tone values corresponding to human vision. Carbon arc lighting gives this daylight realism to color photography. In monochrome, it combines added beauty with the fullest possible achievement of realistic effect.

**NATIONAL CARBON COMPANY, INC.**

Your patrons wish to forget that they are looking at a picture. The closer they come to feeling that they are watching living and breathing people, the better they are pleased. Color is growing steadily in popularity because it adds much to this feeling of realism. But snow-white light is needed to give color features their full value. Low intensity projection falls short of realism because the yellowish tint distorts color values.

Simplified High Intensity projection gives a snow-white light which brings out the full beauty and realism

of color features. It also supplies two and one-half times as much screen light as low intensity projection for the same power consumption. Black and white pictures, as well as color, are more effectively projected by this powerful projection light.

Should you still have low intensity lamps it will pay you to investigate modern, economical, high intensity projection, *the light that pays its own way*. Ask your dealer to show you how improved projection pays investment and operating costs.

*Make your projection equal to that of any theater in the country.*

**SIMPLIFIED  
High Intensity  
PROJECTION**

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# SHORT CUTS IN EDITING

**E**LABORATE equipment for editing is good to possess—but by no means always necessary. One of the best methods of which we've heard recently was described at a meeting of the Los Angeles Cinema Club. It requires some scratch-paper, two pencils, a few dozen clothespins and a bit of string.

To begin, stretch the string between any two supports that may be handy. The backs of a couple of chairs will do. Place the clothespins where they will be handy.

Next, project your film.

As each scene goes through the projector, note down its description on a sheet of the scratch-paper, and give it a number according to the order in which it was shot.

Next, either at the same time or, if you prefer, at another running, renumber each of the scene notes in the order in which the scenes are to appear in the picture. This should be done with a pencil of a different color. We like red, but anything can be used just so it is distinctively different from the first numbering.

## Rearranging Scenes

Then take the slips and arrange them along the string, clipped in place with the clothespins, in the order of the black pencil numbering.

Now you can begin to cut the film!

As you run it through the rewinds, break out each scene and attach it to the line in its proper place. When you finish this "breakdown" you will have all your scenes strung on the line in their original order.

But this order isn't necessarily the order they are to appear in when the picture is completed.

Here's where the red pencil lettering comes in.

The next step is to rearrange the scenes, with their identifying slips and their supporting clips, in the order of the red numbers. Now you will have your scenes strung along the line in their correct order. All you have to do is splice them together.

But wait a minute—this scheme doesn't seem to take care of the titles you haven't yet committed to film, or those added scenes you will have to shoot to fill gaps in continuity.

Oh, doesn't it?

When you are doing the red pencil numbering, you can make similar note slips as to those titles and missing scenes. Thus when you get to the point of splicing you will know that wherever you find a clip, a paper and no film, something is missing from your picture.

## Note Necessary Scenes

For the first cut you can simply splice a bit of blank film into these gaps, and when the missing parts are available you can quickly insert them.

But this still doesn't solve the problem of knowing exactly where each of these additions is to go and which gap is to be filled with which.

Again, "Oh, yeah!" is the answer.

You can use two different types of blank film—one to indicate a missing scene, one to indicate a title. For instance, all of us who have been making movies for any length of time have a good lot of the ground celluloid leader Eastman used to use before the company standardized on its present white-coated leader.

The ground celluloid can therefore be used for, let's say, titles, while the newer white is used for added scenes. Or you can use plain positive film leader for one, tinted base positive for the other.

With a grease pencil or even an ordinary lead pencil you can write the number on this leader. The numbers will enable you to see which bit of added foot-

age is to go into the spot, while the type of leader will tell you at a glance whether it will be a title or a scene.

There is the idea in its pristine simplicity. In this form it involves a penny scratchpad, a dime's worth of clothespins, and a couple of five-and-ten-cent store pencils. You can use the string from the package for holding your scenes if you happen to be really thrifty.

But the same idea can be dressed up if you want to do so. For instance, you can permanently number the clips themselves to supply the black numbers, if you wish.

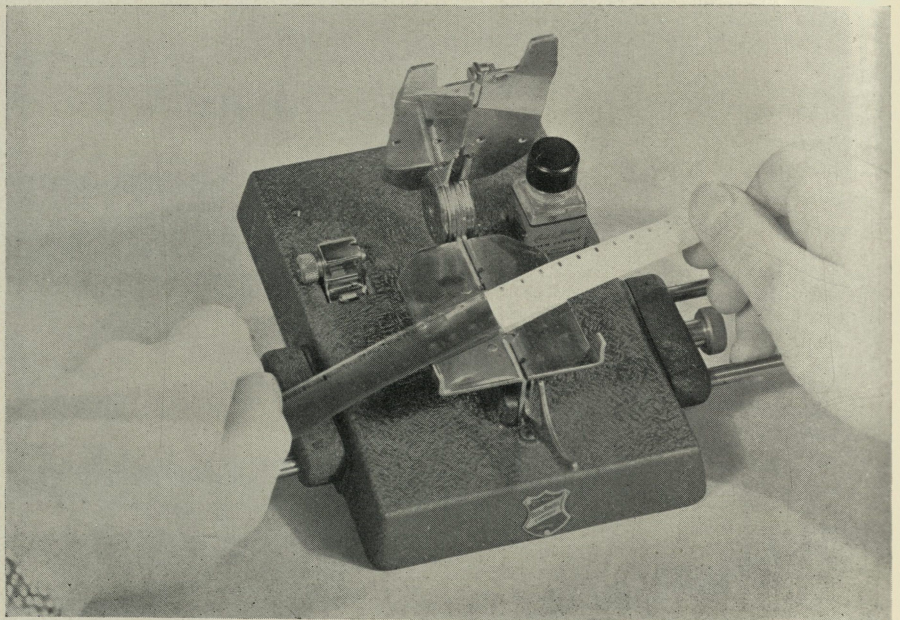
## Use Big Carton

Then cement a bit of white celluloid (from old leader) on the clips to take the red-lettered numbers. The writing can be erased from this surface easily. And by doing so you can eliminate all the slips but the ones indicating missing footage, if you are averse to so much writing.

If you are one of the more particular filers, such as those who dislike to have their film drag on the floor, you can add a cloth-lined bag or box to catch the film and protect it. A big cardboard carton, which almost any store will gladly give you, is excellent for this.

For the lining you can perhaps beg an old sheet from your better half—maybe even persuade her to snip and sew it into a bag for you. The mouth of this bag can be fastened to the carton with big safety pins, or if you want to be really stylish, fitted with a drawstring and tied in place.

Finally, since we are dressing things up, how about following the example of professional film editors and wearing a pair of light, white cotton gloves while you are cutting film? They won't restrict your freedom of motion, but they will eliminate finger-prints which have spoiled so many home movie scenes and splices.

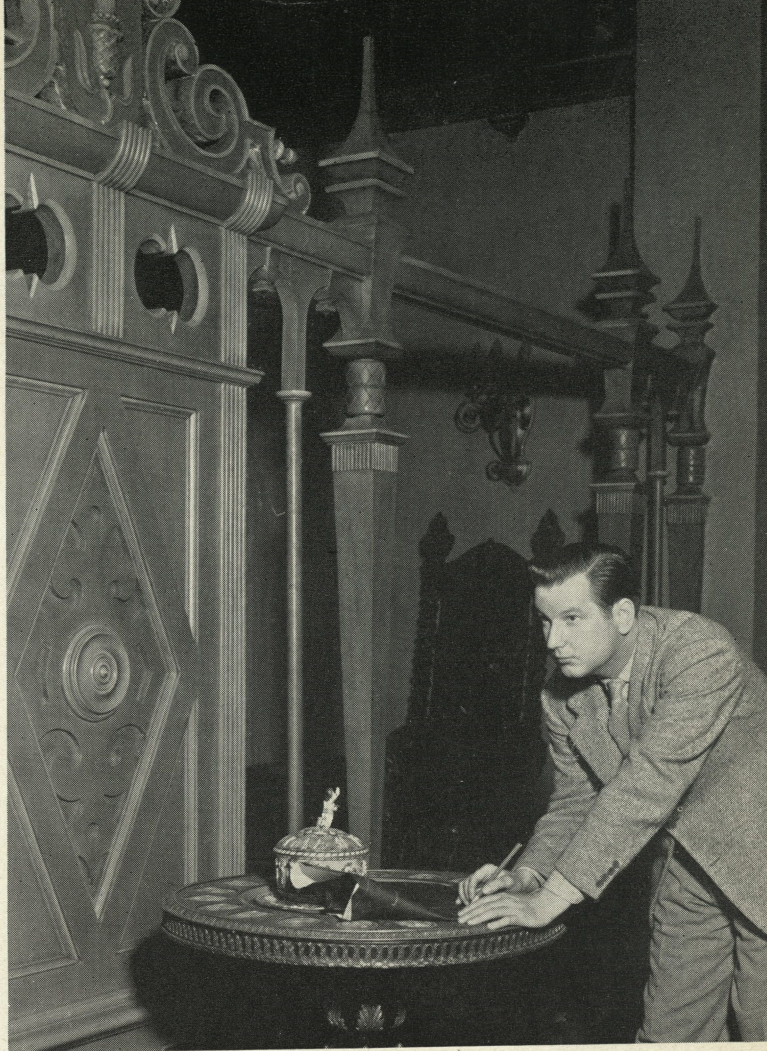


*Filmo 16mm. film splicer showing diagonal splice. Lugs fitting into perforation hold at proper angle.*



# Simplifying of Set Design Brings 'Production Value'

By Jack Otterson



*Jack Otterson, supervising art director, Universal Studio*

A PHOTOGRAPH of a friend or relative snapped in a smiling mood may be a characteristic expression and a technically good picture, but in the long run it is less pleasing than a simpler, non-smiling expression.

If you put that smiling portrait on the wall or desk top where you see it constantly, sooner or later that perpetual smile will become irritating.

We all of us have our "blue Mondays." At such times, looking up to see a portrait smiling fixedly out at you from its frame is enough to make you annoyed at the person pictured, even though it may be your dearest friend.

## Appeal to Imagination

An unsmiling pose, on the other hand, is always sympathetic. When you feel cheerful you can imagine your friend is on the verge of smiling with you. When you feel blue, you can imagine him sympathizing. The picture thus serves as a background for your friendship and suggests mental impressions that match your mood.

A vital element of set design should be an appeal to audience imagination comparable to that of the serious-faced portrait. Within reasonable limits, the more any architectural style or motive can be simplified, the more effectively will the set serve as a sympathetic background for photographed action.

Every architectural style or period can be reduced to certain basic and simple characteristics. In seeking that elusive quality of "production value" which does so much to enhance the effect of the final picture, simplicity of design is a powerful means of conveying the richness of fine taste.

The value pattern of the paint used on the sets is a vital element in obtaining this result.

Early this year Joseph Valentine, A.S.C., in an article in *The American Cinematographer*, told how we had been able to develop a standardized range of colors for set painting. Four pastel colors are used: buff, old-rose, blue-green and blue-gray. We use each of these colors in four values, each ranging from a light to a medium light, a medium dark and a dark.

The basic color in the mixing of these colors is Van Dyke brown. Umber is an unsatisfactory pigment as a base, particularly unsatisfactory photographically. It is an earth color, literally made from dirt, and colors darkened with umber inevitably give a muddy color on the screen.

## Use Less Light

In recent months we have gone through still further experimentation with these colors, and they have proved a tremendous asset. They may be pho-

tographed with a minimum amount of light.

Of these four colors the blue-green, which is a tone strictly on the green side, has proven to be the outstanding color.

At first thought it might seem that a set painted in only one color, though in varying values of that color, might be monotonous both visually and photographically. We have not found this to be so.

The effects that it is possible to obtain with the use of the varying values of one color are amazingly unlimited.

A soft, delicate sensation may be obtained by a subtle use of close values.

We may arrange a more sparkling, almost garish mood by the use of violent contrast of values. And this may further be enhanced by variations of surface textures including flat and glossy surfaces side by side.

## Constant Photographic Values

The values of these particular shades have little fluctuation in photographic reproduction. The cinematographer going on a set with full faith in the color background of the set is thus relieved of a definite problem.

These colors are equally adaptable to exterior sets. Valentine has recently photographed an exterior for Deanna Dur-

**This copy has been damaged.  
Pages 355-356 are missing.**



bin's "First Love," which is painted entirely in shades of our standard blue-green.

Color is an optical sensation only determined in its relationship to surrounding color. These shades have an added asset. They are easily combined with one another in a harmonious pattern of color, and lend themselves most readily to the dressing of the set.

We achieve the most livable and lasting picture by the happy combination of simplification of form and color value.

## Two Television Centers in This Country, Says Lubcke

Harry R. Lubcke, director of television for the Don Lee Broadcasting System of Hollywood, on July 10 addressed the western members of the Society of Motion Picture Engineers on the "Present Status of Television Throughout the United States."

"New York City and Hollywood are indisputably the present television centers, and there is every indication that they will remain so," declared Mr. Lubcke. "New York City, because of its great concentration of population and business activity, and Hollywood, because of its world leadership in the entertainment industries, thus qualify for the leading positions."

"Entertainment is the last ingredient which must be put into the television picture. Television production is the most involved and difficult activity yet known to the entertainment field. It requires continuous production of high quality entertainment. The usual output of a motion picture production unit is seldom more than a few minutes' running time on the theatre screen for an eight hour day of activity."

"It is believed that outside television pickup and educational demonstrations will be important factors in supplying television program needs. Upon this analysis, Thomas S. Lee, president of the Don Lee Broadcasting System, recently purchased the most modern obtainable three camera outside pickup equipments for station W6XA0. This will be delivered shortly."

## RCA Designs Turntable for Reproduction or Recording

A portable two-speed turntable, which provides both recording and instantaneous playback of 16-inch records through any public address system when used with a recording attachment, has been announced by RCA Victor.

Specially designed for use with the new RCA Victor recording attachment, this deluxe precision-built instrument may be used for both high quality recording and reproduction of records ranging from six to sixteen inches in diameter at either 78 rpm or 33 $\frac{1}{3}$  rpm.

Compact and easily installed, it is finding many applications in schools, hotels, churches, theatres, advertising agencies, broadcasting stations and the many other institutions which today are opening new markets in the recording and commercial sound fields.

Backed by the company's forty years of experience in the fields of sound recording and reproduction, RCA Victor engineers have incorporated the latest advances in technical design and styling in the new turntable.

Powered by a heavy, constant speed motor, the instrument is equipped with a balanced rim-driven turntable and an improved high quality magnetic pickup which reproduces either from the center

of the record outward, or from the rim to the center.

Equipped with simple plug-in connections for any public address system, it has master volume and continuously variable tone controls. The instrument is housed in a neat carrying case covered with tough fabricoid.

## Photography as a Hobby

**Photography as a Hobby.** By Fred B. Barton, member News Photographers' Association, Portage Camera Club, Cleveland Photographic Society. Illustrations (pen and ink) by Don Wootton. Harper & Brothers, New York and London. 1939. 144 pp. \$2.

Here is a book written by a man who loves his camera or cameras and who right in the beginning gets down to cases. He will not make for popularity in some quarters when he declares that thanks to the new fast films emphasis is going to be less on the camera you own and more on how you use it.

"The thing to remember is that only about 15 percent of your success depends on your camera; the 85 percent depends on what's under your hat," he points out.

The writer talks down high priced and many gadgeted cameras for those who have not had or will not have time and means to study them. In fact, in easy flowing style he writes interestingly and informingly of a large subject—and in common sense fashion.

There are eighteen chapters. Among these are talks devoted to the kind of camera that should be bought, to the necessity of seeing pictures, to composition and the meaning of it; the matter of a darkroom, of candid camera and enlargements, color photography, better home movies, pictures by artificial light, photography for women, making money with your camera, tying your camera to other hobbies—and your job, and holding down the cost.

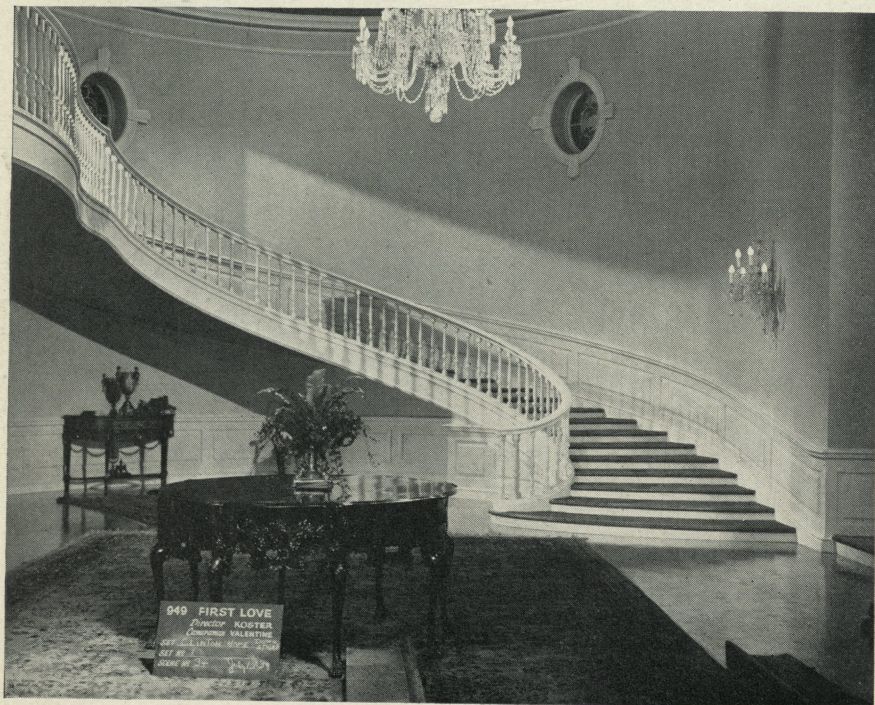
The book is one that deserves better than merely being read. It should be kept at hand—for occasional reading and rereading.

## British Newsreelers Concerned

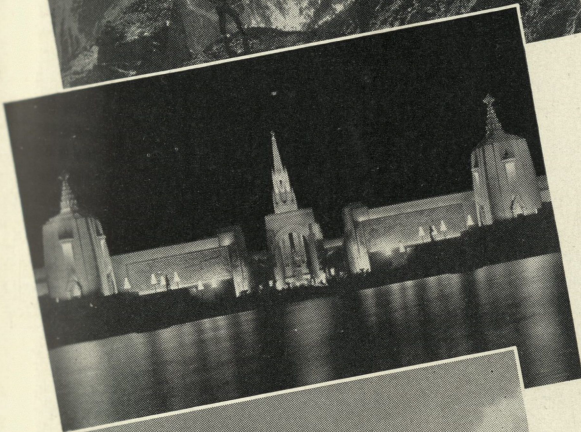
British motion-picture producers are greatly disturbed over the proposal by the Chancellor of the Exchequer to increase the excise tax on motion picture film, Trade Commissioner C. E. Brookhart, London, has informed the Department of Commerce.

News reel producing companies maintain that if the proposed duty becomes effective they cannot continue to operate. It is contended that the tax will result in the complete ruin of the news theater business.

*One of Otterson's monochromatic sets for "First Love." Painted in two shades of blue-gray, the color scheme is pleasing visually as well as photographically. Still from art department files, photographed by Roman Freulich.*







# *In* KODACHROME

**T**HERE'S modern magic in the phrase, "in Kodachrome." It is not merely the magic of a great photographic achievement; it is, more importantly, the magic of your ability, through Kodachrome, so easily to picture the whole world of color in the home movies you make. Load your movie camera—8 mm. or 16 mm.—with Kodachrome Film, and start shooting.

Indoors or out, day or night, the world is colorful. At the seaside, in the mountains, at the Fairs, wherever you may go, wherever you may be, there's color—color to see, color to picture in Kodachrome. Subtle color, vivid color—Kodachrome depicts it beautifully.

There's regular Kodachrome for daylight use, and Type A Kodachrome for movie-making by artificial light (including World's Fair illuminations). Both are the same price—and the price includes Eastman processing and return of the film, ready for projection.

**EASTMAN KODAK COMPANY  
ROCHESTER, N. Y.**



16 mm. Ciné-Kodak Kodachrome Film, both regular and Type A, is available in 100-foot rolls at \$9; 50-foot magazines at \$5; 50-foot rolls at \$4.75. Kodachrome for 8 mm. cameras is available in 25-foot rolls (the equivalent, in screen time, of 100 feet of 16 mm. film) at \$3.75. All prices include processing.



# Introduction to

By Ormal I. Sprungman



*Extremely fast movie film emulsions have broadened the field of indoor photography. This shot was taken at a Shrine Circus performance in Minneapolis' auditorium.*

which individual images were outlined by hand.

Then came the Eastman patent covering the use of transparent celluloid for supporting emulsion, and out of this grew a bevy of different film widths—35mm., 17.5mm., 21mm., 15mm., 22mm., 28mm., 9.5mm.

## Varying Widths

Some had single perforations in the center, others ran along each side. One film carried three separate rows of pictures, each row being projected in succession by simply turning a knob, mounted on the projector.

In 1923 Eastman announced its 16mm. reversal acetate film, and in the same year the Victor and Cine-Kodak hand-cranked 16mm. movie cameras made their debut. In 1924, Bell & Howell introduced a spring-driven 16mm. Filmo and a 200-watt projector to match. As time trotted along, improvements were made in the shape and operation by experts striving for compactness.

The f/6.3 lenses were replaced by f/3.5, and before long f/1.9, f/1.5 and f/1.4 lenses were no longer luxuries. Lens turrets and variable speeds were added, while the interchangeability of long focus and wide angle lenses gave the miniature

**L**ONG before the days of the nickelodeon bleary-eyed inventors were dabbling with the intricacies of home movies, experimenting with ways and means of making pictures move in life-like fashion.

The magic lantern, devised just three centuries ago, was all right in its way. It tickled the fancy of the hoopskirt generation, and it provided a respite from the parlor pastime of thumb-twiddling. But it still left much to be desired.

In many of the larger cities folks even paid good money to watch a soloist step out on the stage of the "op'ry" house and chant a bit while colored slides flashed on the screen. It was wellnigh marvelous what this world was coming to.

Then scientists discovered that most every average person had something which nobody thought he had—persistence of vision. It bridged the gap between slides and movies. The human eye, they found, was not only able to record an image but to retain it for a split second before another image moved in and took its place.

## Knowledge of Movement

Because of this optical illusion one is led to believe that he really sees pictures in motion when projected on a screen, when, as a matter of fact, he is actually witnessing a very rapid series of very inanimate still pictures.

Examine any typical action sequence

from an 8mm. or a 16mm. film. Here, for instance, is a strip showing a closeup of a hiker's boots moving down the road. If the stroll is leisurely, perhaps a dozen or more individual movie frames may be exposed during the procedure of lifting one boot and planting it down again.

If the hiker is trotting, perhaps only half as many frames will record the more rapid action. Where the action is fast, the scene recorded in each frame changes quickly, and some of the frames may even look blurred.

But where the pace is slow, each succeeding frame more and more resembles its preceding one, and where no action occurs whatsoever each frame is identical in appearance.

It is this knowledge of movement that finally gave birth to such animated characters as Mickey Mouse and Donald Duck and Snow White and her midget crew.

Yet even Disney can't be too high-hat, for more than 100 years ago they were fooling with animation. One fellow pasted a series of hand drawings on a disc and revolved it behind another disc punctured with apertures, through which spectators gazed while the discs were spun.

Later, action was photographed on a glass disc, and finally a device was produced which permitted the screening of short lengths of transparent film on

*George Culbertson, member of the Minneapolis early dual turntable unit he built for synchronous loud speaker nests in the bottom of the portable on a compact unit, half the*





# Moviemaking

Photographs by the Writer

the camera all the prestige and versatility of professional outfit.

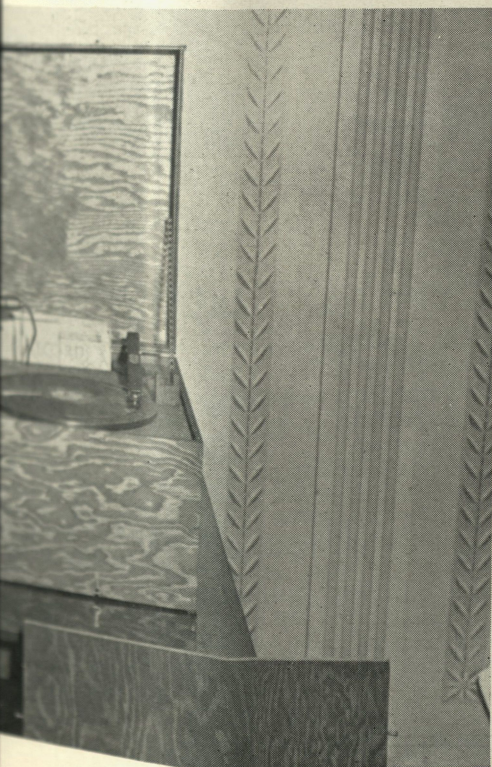
edacolor movies were unique, but Kodak lent the final artistic touch. And now sound even on color film an unbelievable thing, it seems that the only remaining improvements are third dimension and the power of smell, and we don't doubt that the experts are working on both.

## Fifty Choices

oughly speaking, there are approximately 50 standard models of movie cameras on the market today, produced by better than a dozen independent manufacturers. These outfits range in price from around \$10 for an inexpensive outfit up to pretty close to \$500 for a deluxe camera, precision-built and professional operation.

et, despite the rather high price level of the cameras, moviemaking is by no means a man's hobby. It's one pastime where store owners and elevator operators can rub elbows with bank presidents and big business men. The wealthy fellow usually invests in the best equipment and accumulates all the accessories, while the poor devil buys what he can best afford, and

club and 8mm. enthusiast, is shown with an instrument and music to his films. The removable lens when not in use. Culbertson is now working on a more and doubly efficient.



*If the camera is kept in readiness at all times, such intimate views as this grouse crossing a backwoods road in northern Minnesota are possible.*



the odds are still in his favor that he'll produce the best pictures. Mere ownership of costly equipment is no guarantee of topnotch movies. Nor do years of increasing experience always insure increasing quality.

No doubt you know of amateurs new to the game who have studied its perplexities with diligence, and who are far ahead of the fellow who has been shooting haphazardly for a decade or more.

All right. You say you're sold on amateur movies. If you already haven't a camera, you're going to get one soon. But you're still a bit leary about the workings of one of those contraptions. You're afraid that it'll take an Einstein brain to tangle with focal lengths, vignettes, variable speeds and film emulsions. That's where you're wrong.

If you can click a still camera, you can take movies. Nobody dares say how good they'll be at first, but if you follow the instruction book we'll warrant they'll be projectionable.

Recent improvements in laboratory processing of black and white films have made possible the partial rectifying of glaring exposure faults even on the part of beginners.

Chances are you'll save that first film for all eternity. It'll be a sort of a handy club to pound some sense into your later filming efforts.

Anything that you can remember about snapshooting will be particularly

helpful to you in your movie work. All that you know about composition, exposure, outdoor or indoor lighting, film speeds and camera angles will be distinctly advantageous as soon as you thread your initial roll.

In addition, just pay a little attention to scene length, camera speed, continuity planning and proper editing and titling, and that's as complex as your movie problems will ever get.

If all scenes required the same amount of footage—that is, remained on the screen for the same length of time—your finished reel would be pretty monotonous, and so you will learn by experience and by careful observance of the topnotch work of others when to cut and when not to cut.

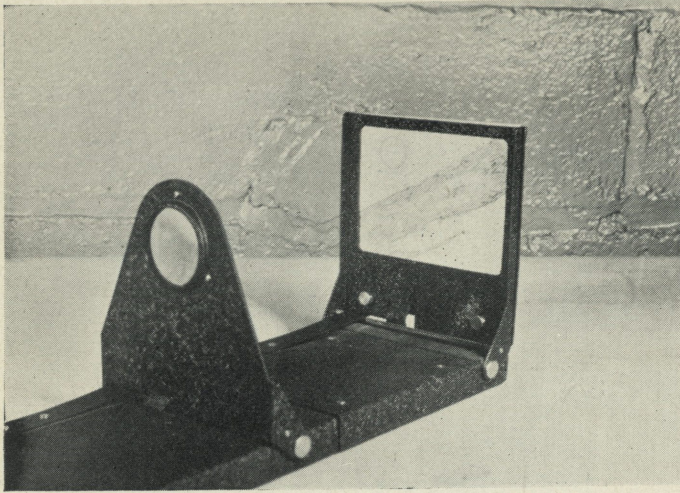
While most shooting will be done at normal speed—16 frames a second—there may be times when you may wish to use only 8 frames, if your camera is so equipped, to obtain super-fast, exaggerated action, or 32 to 64 frames to secure slow motion for studying otherwise rapid movements.

## Handling Important

Camera handling is quite important, and one of the earmarks of the beginner is to shoot his jittery footage without a tripod or other firm support.

Another earmark is his uncanny ability at panoraming his camera. He sprays the landscape like a garden hose. He pans up buildings and down streets. He





pan from right to left and back to right again.

Unfortunately, the stuff is eye-straining and unmovielike. Sooner or later he learns to shoot steady pictures, panoraming only to follow moving objects or swing from one object of interest to another, and then very slowly.

Panoraming, he finds, also can be minimized by taking different angle shots of the same subject, and swinging in from long shots to medium shots and closeups.

There are many tricks to be learned in amateur moviemaking. But don't expect to learn them in your first year. Perhaps that is what gives the movie hobby its zest and universal appeal, for amateur cinematography, unlike other hobbies, has followers of many colors, races and creeds living in Europe, Asia, Australia, Africa and the Americas.

Outsiders are usually amazed at the versatility of the modern amateur movie camera.

Business has found a spot for it. Sixteen millimeter industrial films, with or without sound, are being made and screened right along, showing distinctive sales methods, manufacturing processes, and for recording the progress of plants or analyzing mass production.

Whether it's a feed mill, a pickle plant or an oil dispensary, the practical sub-standard movie fits into the picture.

#### Professional Men Addicts

Professional men are extremely partial toward the compact little cameras not only for photographing their hobbies but for filming their work. Many medical men have recorded on celluloid complete histories of unusual cases, and not a few doctors have even rigged up remotely controlled cameras and lights over operating tables to shoot as they work.

Dentists, too, have discovered the usefulness of sub-standard films in monochrome or color. A closeup cine production on Immediate Denture Service, for instance, is twice as effective as charts, slides or long-winded discussions at dental conclaves, while films showing

*Left, a cine titler is handy for enlarging portions of maps, as well as for filming extreme closeups and titles.*

*Right, pets always make good filming subjects, and closeup views are most essential.*

mouth health and teeth care have already proved their educational importance among adults as well as children.

Community chest drives, welfare groups, orphan homes and settlement houses rely on amateur movies as effective propaganda for outlining their shortcomings and their needs, and for soliciting funds for future operations.

Opportunities for turning his hobby into worthwhile profits as well as fun await the amateur movie maker who can produce and shoot worthwhile footage.

Because of the less expensive and more convenient small film widths, it has been possible to provide teaching films for classroom use in far greater quantity than if the more costly 35mm. film were used. Reduction prints of theatrical films have even made the voice and personality of many well-known Hollywood stars known in every home.

In courtrooms where movies have been properly admitted as evidence, their

screening has gone far in influencing juries. Accident victims, exaggerating their injuries and demanding exorbitant sums, have been put in their place at public trials by the showing of movies, taken secretly, revealing the use of supposedly injured limbs, or the true physical status of allegedly incapacitated persons.

#### Documentaries Growing

Documentary and historical movies in 8mm. or 16mm. have come forth from even the smallest communities, where public-spirited citizens have chronicled the progress of their hamlets, along with the pageants and public meetings.

Even pastors, who once scorned movies as though Satan himself were the cameraman, now utilize minicams to preserve and memorialize the story of the origin and growth of their congregations.

In fact, special reels have been prepared to gain public support toward offsetting church indebtedness or aiding building programs through individual pledges.

So successful are amateur movies in influencing individual habits that the railroad, steamship and travel companies have discovered that well-filmed travelogs by staff photographers provide excellent advertising.

Whatever your experience or knowledge, your personality will doubtless enter into your filming. If you're an Indian relic collector, you'll probably specialize on Redskin filming. If you like hunting or fishing, your footage will center mainly around the outdoor life.

If you have strong artistic tastes, your reels will probably record only the beautiful. This is as it should be, for moviemaking without a purpose is aimless, wasteful shooting. If you like filming birds, for instance, make a study of their habits and personalities, and because you specialize you will attain a reputation for your work, and fellow moviemakers will call on you for advice.

If your companion hobby is horticulture, flower filming will probably steal

*(Continued on Page 382)*

*16mm. frame enlargement of hand-lettered title on double-exposed background.*





# PROCESS SHOTS AIDED BY TRIPLE PROJECTOR

By WILLIAM STULL, A.S.C.

**W**IDELY differing production problems during the past year have led two of Hollywood's leading directors of special process photography, working quite independent of each other, to develop fundamentally similar equipment which promises great advances in the scope of the projected background or transparency process.

In each case, increased screen brightness was the key to the problem in hand. At the Warner Brothers' Studio Byron Haskin, A.S.C., needed higher screen illumination to give color "process shots" the same physical scope and flexibility which has made monochrome projection process cinematography such an asset.

At Paramount Farciot Edouart, A.S.C., required greater screen brilliance not only for color transparencies, but to cope with the requirements of making monochrome transparency scenes on extremely large screens. He therefore determined upon a logical expansion of the principles which had evolved his dual-screen camera and projection system which had received an Academy Award in 1937.

Both reasoned that, with existing light sources and lenses, the maximum in light delivery had been reached. More efficient projection lamps and faster lenses could undoubtedly be developed (such developments are even now nearing completion), but such research would be an expensive and time consuming process.

With productions which would make demands greater than could be met by existing equipment slated for immediate shooting some method had to be found to obtain higher screen brightness from existing light sources.

## Compounding Illumination

Under these circumstances the solution was found in compounding light sources and projectors. If one pro-

jector does not give enough light, two or more, with their images superimposed on the screen, should do so.

Synchronizing the several projection movements would present no more of a problem than synchronizing a single projector and a camera. The parallax caused by the physical separation of the projecting lenses and the consequent displacement of the images they project would, however, be a difficulty.

Since two or three separate projectors could not be placed sufficiently close together to avoid this trouble, while still remaining accessible for operation, it was clear that the several projection heads would have to be engineered into a single, compounded unit.

Both the Paramount and the Warner Brothers' designs therefore consist of three basically standard process projection heads mounted on a common base. This base disposes the three heads in a T-formation. The center head, mounted on what might be called the upright of the T, projects directly on to the screen in the usual manner.

The two outboard heads, mounted on the two arms of the T, face each other, with their optical axes at right angles to that of the center projector, and their beams are reflected to the screen by means of front-surface mirrors.

## Parallax Compensation

In the Paramount machine the lamp-houses are mounted on an optically centered base integral with that of the projection movements. In the Warner installation the lamphouse and head bases are separate units and operated separately.

As might be expected when two designers independently follow similar courses, the two designs differ considerably in detail. This is particularly noticeable in the methods of focusing and of compensating for parallax.

In the Warner design, focusing is done by an adjustment which racks the projection movement forward or back in relation to a rigidly positioned lens.

In the Paramount design the lenses, all of which are fitted with selsyn-motored remote control focusing, are mounted in substantially conventional positions, with the reflecting mirrors in front of the outboard lenses, with enough space between their inner edges to allow the center lens to project its beam between them. Each of the three lenses can be focused independently, from the camera position.

Parallax compensation in the Warner design is obtained by lateral adjustments of the two outboard projection heads in a manner reminiscent to that of the adjustable back of a still camera, though of course of infinitely greater precision.

In the Paramount design parallax compensation is secured by precision adjustments of the two outboard lenses in much the same fashion as the rising and laterally sliding frontboard of a still camera. Either of the two lenses may be adjusted individually.

## Three in One

The mirrors have precision micrometer adjustments of rotation and tilt to exactly and perfectly superimpose the three images into one.

Both equipments provide a means of tilting the whole unit up or down to place the picture at any desired height.

The axis of this tilting rotation in the Warner machine coincides with the optical axis of the two outer projection heads.

In the Paramount design all three lenses, movements and lamp-houses are mounted in perfect alignment on a single base. Therefore the entire triple projector may be rotated or tilted as a unit.

This is done by rotating it about a precision ball and socket joint in the base, and does not affect the alignment or registration of any of the three images or their light sources with respect to each other. All three images remain in perfect register regardless of pan or tilt.

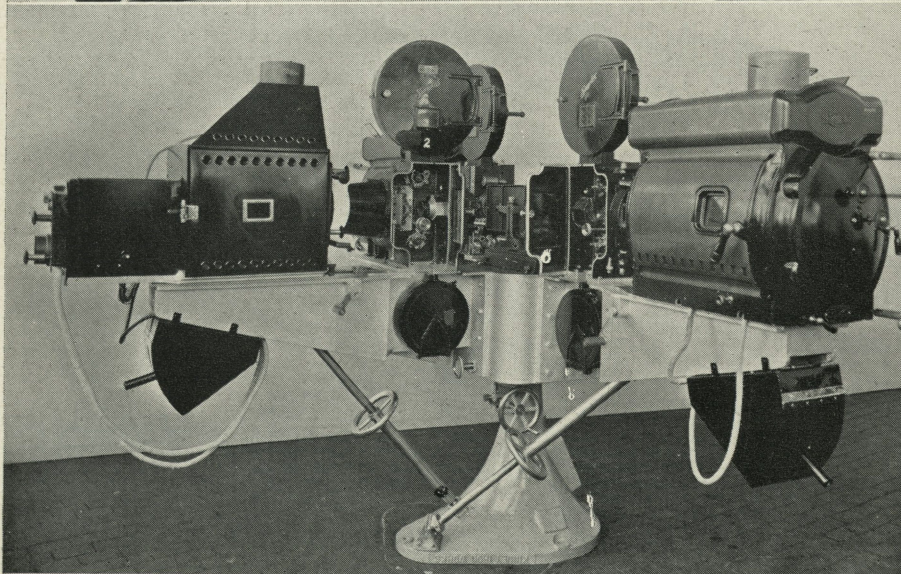
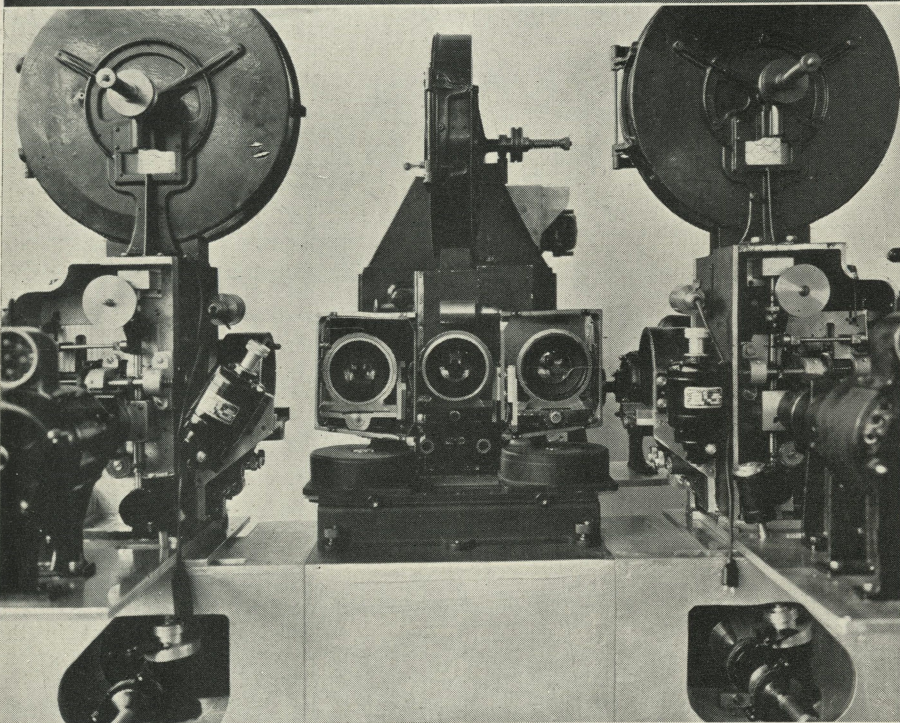
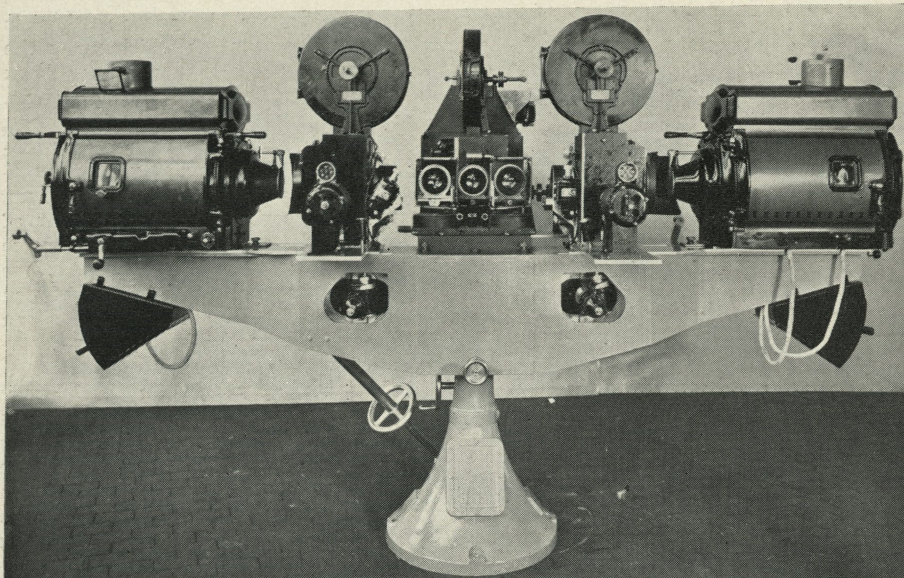
With three film movements and lamp-houses there is inevitably a definite increase in the noise of operation as compared to a single projector. Therefore in each case these triple head units are housed in soundproof booths about the size of a small theatre's projection booth.

## Process Shots in Color

Paramount's triplex is a completely portable installation. The entire four-ton booth is mounted on a hoist by which it may quickly be adjusted to any desired lens center height up to eighteen feet above the stage floor. When yet higher elevations are needed the booth is placed on special steel parallels. It is moved about the studio with the same freedom as any portable single projector.

The Warner installation is at present





The Paramount triple-head projector. Top, front view; note how entire base may be panned or tilted as a unit about the pedestal. Center, closer view of triplex mechanism; note selsyn motors for remote control focusing from camera position, visible beside the two outboard heads. Bottom, rear view of Paramount machine; note locking tie rods for rigid lock in any pan or tilt position, also that the right hand projection movement is made for left hand threading to conserve space in booth.

of the fixed type, though it is planned ultimately to adapt it for portable use.

As has been said, the installation at Warner Brothers grew out of the process shot requirements of natural color cinematography. When the production of "Gold Is Where You Find It" was being planned, it became evident that certain scenes could not efficiently be photographed without the use of the projected background process on a scale impossible in color with any existing single projection units.

Obviously the light absorption of even a light color print will make a marked reduction in screen brightness, while the heavy filter absorption of the three-color camera, combined with the relatively slower film then in use, would put further restrictions on practical screen sizes.

With a single projector, a picture ten or twelve feet wide was the apparent maximum possible in color.

With the triple head projector and the old, slower Technicolor film, it became possible to use background screens fifteen to eighteen feet wide for color process-shots. With the new and faster emulsions recently introduced by Technicolor, further advances seem possible, though as yet none too much actual production process work has been done in color on extremely large screens.

Tests at Warners, however, indicate that the combination of the faster color film and the triple-head projector will permit the making of natural-color projection shots on screens as large as those used in monochrome before the acceptance of today's ultra-fast black and white films—in other words, the use of screens close to twenty feet in width, depending, of course, on the nature of the scene and background involved.

#### Color Corrected Lenses

In this connection, Haskin makes an interesting comment. "One of the first things we learned about making color projection shots," he says, "was the importance of using projection lenses that were fully color corrected.

"Our first experiments were made with the lenses we had always used and found efficient for monochrome process projection; they were not color corrected. Even with a single projector, securing good definition was a tremendous problem.

"With the triple-head machine, where three uncorrected lenses added their



*The Warner Brothers' triplex. Top, front view. Center, closer view of the three heads; what appear to be the mounts of the two outboard lenses are actually their reflections in the first surface mirrors. Bottom, rear view of the machine, showing independent mount and tilting mechanism of center lamp-house.*

aberrations together, it became almost impossible. As soon as we installed lenses that were properly color-corrected, the trouble vanished: we got better definition than we had hoped would be possible.

"But when you stop to think that our color productions are being shown to the audiences of a majority of the world's theatres through lenses of the same, uncorrected type, you certainly wonder that color has been so successful, in spite of such a handicap.

"With the increasing trend toward color, it seems a foregone conclusion that ultimately even the smaller theatres will find it necessary to re-equip themselves with modern, color-corrected projection lenses.

"It may be interesting to mention that we have found a way to put color to work in simplifying the otherwise difficult problem of lining up our three images for perfect registration.

"It is easy enough to get a rough adjustment by ordinary methods; but getting the final, almost microscopic superimposition of the three images that will literally blend them into one perfect one, is a very different matter.

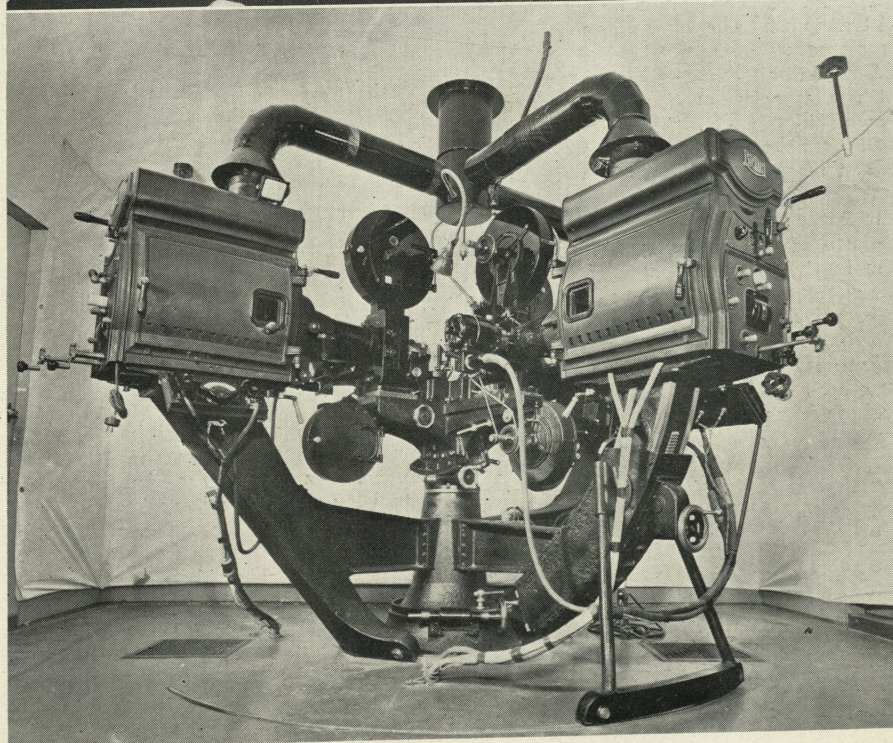
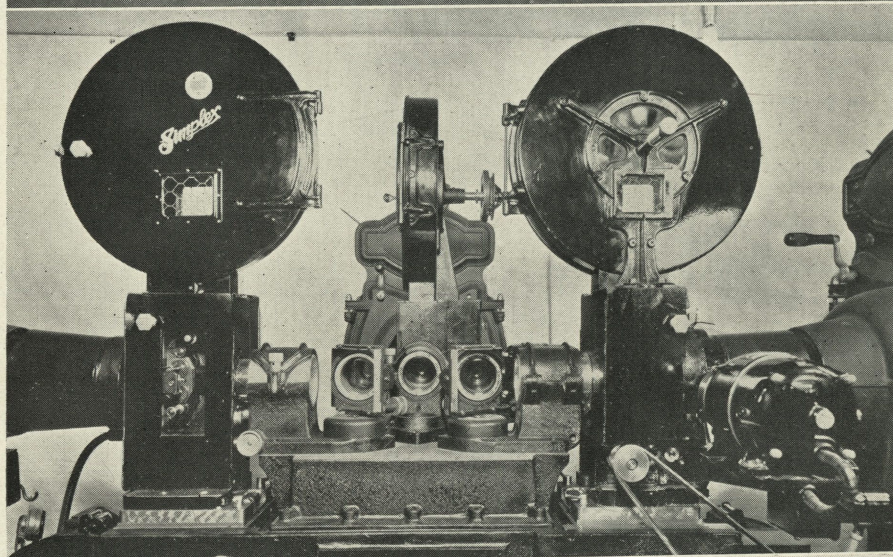
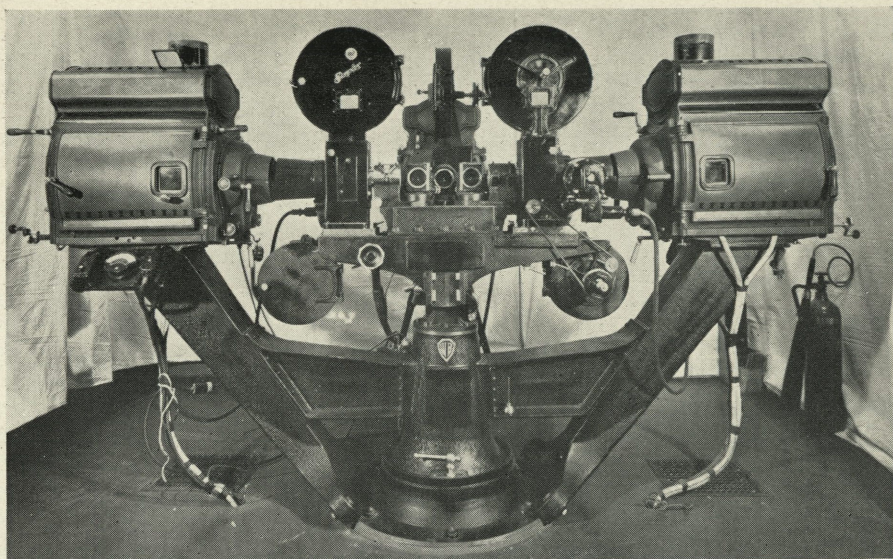
#### Additive Color Focusing

"So we use additive color projection. Three images of a simple chart are projected, each in its proper additive color. When we see, say, a red fringe around the design, we know that the outboard head projecting the red image is out of register, and the side on which the fringe appears indicates in which direction it is out of register.

"The same is true about the other projector if we see a blue fringe. When our chart appears as a pure black and white, we know immediately that all three images are in perfect register. In this way we can get our equipment lined up much faster and easier than would be possible any other way.

"In this connection, we've found that the design of our unit, in which the three lenses are rigidly mounted, saves trouble when it is necessary to change lenses between takes—as for instance when going from a long-shot to a close-up of the same scene, and using the same background plate. The projector is already correctly aligned. The lenses are, of course, matched sets in standardized mounts.

"All that is necessary is to open the clamplike mount, slip out the old lenses and slip the new ones into place. When the mount is fastened shut they are held rigidly in position in the same alignment as were the set previously used. It





is only necessary to refocus—and the outfit is ready to roll on the next take.

"It has been our experience that the use of the triple-head background projector has done more than any other single factor to advance color to production parity with black and white. In monochrome today we are so accustomed to the use of large-scale projected background process shots as a means of saving time, effort and money that we take it for granted.

"Many of us only notice it negatively—as when, as was so long the case in color, technical considerations make it impossible to apply the process on the same sweeping scale. Then the creative workers in the studio find their efforts hampered, while the executives find costs mounting past the danger point.

"The combination of the triple-head projector and the new, faster color film should remove the last of these restrictions from color, and insofar as special process cinematography is concerned enable us to make color pictures with the same facility and efficiency we do black and white."

#### Monochrome Achievements

The Paramount triple-head projector, while it was developed with an eye to solving the color problems in such films as "Men with Wings," is perhaps best known for the spectacular achievements it made possible in extreme large scale monochrome transparency process work. It received its baptism in the production of "Spawn of the North." For this an enormous completely enclosed tank-stage, several acres in area, was built. Its dimensions were sufficient to permit as many as three full-sized fifty-foot fishing boats to be manoeuvred, with in addition any necessary icebergs in the foreground. The background was a projected transparency, of a size, as may be appreciated, never before thought possible.

The initial experiments were made with a twenty-four-foot screen, which proved inadequate. Therefore what is held to be the world's largest process screen was built: it measures thirty-six feet in width by twenty-seven feet high. The triple-head projector, combined with the use of modern, high-speed negative film in the composite camera, permitted the successful use of the process on this impressive scale.

The tremendous increase in screen brightness yielded by this projector may, as Edouart points out, be utilized in several ways, as may be expedient. "A conservative figure for this increase," he states, is an average of not less than 280 per cent more light than is possible with any existing single projection equipment.

"On one hand, this means that a much larger screen area can be used, either in monochrome, as was the case in 'Spawn of the North,' or in color, as was the case in 'Men with Wings,' for some scenes of which we manoeuvred a complete full-sized airplane in front of the transparency screen. In the latter con-

nection it must be pointed out that at present the transparency cinematographer is seriously handicapped by the fact that all existing color cameras are fitted with the Academy Standard sound picture aperture rather than with the larger, full frame silent picture aperture.

"This means that almost one third of the frame area—29½ per cent, to be exact—is wasted, and with it a corresponding percentage of screen illumination. Under present conditions, that cannot be helped.

"But in addition the triple projector's increased screen brightness can be turned to added advantage in other directions, giving further essential benefits in flexibility and cumulative quality.

#### Better Gradation

"With this increased illumination, when such extreme screen sizes need not be sought, darker prints may be used. This gives a better gradational scale, and better quality both on the process screen and in the final composite print.

"In the same way, it becomes possible in many shots to reduce the amperage of the individual projection light sources, thereby subjecting the background plates to less heat, and giving them a proportionately longer useful life.

### Duncan Little Invited to Quebec to Stage Film Show

As we are going to press this month Duncan MacD. Little of New York is in Quebec on the invitation of Louis Coderre, deputy minister of commerce and industry of the province. He is there attending a conference and picture show, at the latter of which he will appear in a dual role. He will be the speaker of the occasion and as the sponsor for the films shown, which will be his "Making of Canadian Home-spun," "Here and There in Habitant Land" and "The City on the Rock."

It all was an honor Mr. Little hardly could refuse to accept: that a foreigner should be invited to attend a conference in a strange land and show his own pictures of that strang land. The same program will be repeated at a gathering sponsored by the local chapter of the Imperial Order of Daughters of the Empire. One of those in the Little party will be Tom Andrews, who will take care of the musical part of the entertainment.

On July 29 and 30 will be the sixth annual canoe race. On the 28th preceding the race will be staged the fourth annual summer show, under the auspices of the Societe du Flambeau of Trois-Rivieres.

Last fall Mr. Little had started a film on logging, intending to secure the winter scenes in the months to come. Instead there intervened three months of Grand Jury service, delaying the snow stuff for the coming winter. The film is now three-quarters complete.

"The increased screen brightness can also be turned to great advantage by making it possible to stop down the lens of the composite camera, thereby getting a much-needed increase in depth of field.

"With today's steadily increasing use of really large scale transparency shots, this is a vital factor. Some of the transparency sequences for 'Geronimo,' for instance, were on so large a scale that the whole of one of the studio's largest stages was occupied by the set and projection set-up. The composite camera and the projector were separated by as much as 196 feet, with the screen some 75 feet distant from the camera. Yet in some scenes the actor nearest the camera might be within 18 feet from the lens.

"Obviously, extreme depth of field will be necessary under such circumstances, and it can only be achieved by being able to stop down the lens of the composite camera. Even with today's fast films, this is in turn largely dependent upon the illumination of the background screen.

"If this screen can only be illuminated to a degree demanding an f:2.3 exposure, such a shot is manifestly impossible, for it will lack the depth of field which will make it convincing.

"If, on the other hand, the background screen is illuminated to a level permitting an exposure at, say, f:3.1 or less, it becomes practical to make the shot which, in this case, requires adequate definition from fifteen feet or less to infinity!"

#### Greater Flexibility

Both Edouart and Haskin point out that the triple projection principle minimizes several existing weaknesses of the process, and in addition permits new and potentially valuable methods of control.

Graininess in the projected picture, for instance, has always been a considerable problem. With images from three separate positives superimposed on the screen, the effect of graininess will be minimized, since the individual grain images tend to overlap and cancel each other out.

The same is true of flicker caused by variations in the projection light source. These fluctuations are most frequently caused by defects in the carbons; and it is highly improbable that such defects should ever occur identically and simultaneously in three sets of carbons.

Clearly, in the case of a flicker in one of the three arcs, the total effect on the projected picture will be but one-third as great as would be the case in a projector employing but a single light source.

Under most circumstances, the use of the three light sources should tend to a marked reduction in the "hot spot" problems ordinarily encountered. With an ample reserve of illuminating power the arc beams need not be concentrated to so intense a spot on the aperture, with a resultingly more even distribution of illumination over the picture area.

(Continued on Page 376)



# CONSOLIDATED INSTALLS

## DEPARTMENT FOR 16 MM.

**A**T considerable expense Consolidated Film Industries has equipped its Hollywood plant for the production of commercial 16mm. prints of the same quality as that which for many years has characterized its 35mm. output. In a room perhaps 12 by 20 feet in area, but with abundant extra space readily accessible, it has installed a brand new Fonda developing machine, which already is at work.

George W. Yates, who for many years has been an executive of Consolidated, has been assigned charge of the new department. For the last four months, with his well known capacity for digging into a subject in which he is interested, he has given his undivided time to making a survey of the 16mm. field, which included an exhaustive study of the relative merits of the quality that rides in prints reduced from 35mm. negative, in 16mm. reversal and in straight 16mm. negative and positive.

Mr. Yates has no hesitation in expressing his belief that with the facilities that have been developed by Consolidated in recent years the highest quality in 16mm. prints comes from those that have been reduced from 35mm. At the same time with equal readiness he expresses a wish to give a customer what he wants.

"We often hear it said the 16mm. branch of the industry is an infant," said the head of the new department. "Maybe it is, but it is a lusty and a healthy infant and it requires nourishment. We intend to see that so far as we are concerned it gets just that. We intend to try to profit by the mistakes that were made in the 35mm. field.

"We want to make good prints from original negatives, to build up and enhance the stock that is confided to our custody. In our plant we aim to give all possible and available service to our customers—and I give our promise we won't enter into competition with them."

In showing his 16mm. laboratory installation Mr. Yates declared not only was the equipment air conditioned but it was the last word in progress in developing and in construction of the equipment. "Yes, you may ask if it is a sort of trial horse," he added with a grim smile, "but we believe that horse already is on his way to town. We are passing on to 16mm. the benefit of all the experience we have gained over a long period in 35mm.

"We are installing projection, too, for 16mm. Arrangements will be completed shortly so that the smaller of the two parallel theatrical projection rooms may quickly and conveniently be converted into a room for the accommodation of

the 16mm.—and with projection equipment designed to give our prints the best possible reproduction on the screen."

In Consolidated's extensive laboratory in Seward street, in its parklike and landscaped grounds, plans are nearly completed for the final taking over of

Magnacolor bipack. That is another announcement of importance for the near future.

### Fischbeck-Murphy

Harry Fischbeck, A.S.C., and Miss Billie Murphy of Palm Springs were married in July by the Rev. Mr. Jardine of London. The bride operates the House of Murphy in Palm Springs. Mr. Fischbeck has been a director of Photography for Paramount for eighteen years. He has just completed his assignment on "World on Parade."

### Our Compliments to John Alton, A.S.C.

**S**OMETHING over a year ago John Alton, A.S.C., speaking nearly a dozen languages, went to Buenos Aires and was engaged by Argentina Sono Film. Actually it was March 5 he sailed from New Orleans. On his arrival in B. A. he found a company car at the dock assigned to convey him to the studio, which is one of the tops as studios go in South America. Early in June Alton completed his first picture, "El Ultimo Encounter," translated as "The Last Encounter." It was praised in the press, which hailed the return to the country of the photographer, who really is a Hollywoodian but who has worked much abroad. By the following October he had finished his second picture "Madreselva," starring Libertad Lamarque. The Argentine press was most generous in its praise of the picture, and lavish indeed in its kind words for Alton.

Even as the press were bestowing compliments on "Madreselva" Alton already was at work on the same company's "Puerta Cerrada," or "Closed Door" in English. In speaking of his plans for the coming subject Alton privately intimated without going into detail he might introduce something novel in photography.

On the evening of July 23, for the second night, "Puerta Cerrada" was shown at the new Academy Theatre in Hollywood. In a brief comment prior to the opening of the picture Donald Gledhill, executive secretary of the Academy, said the audience was in for a treat, in spite of the fact the dialogue was in Spanish and there were no English titles.

Also the secretary assured the house that for "sheer pictorial beauty" what was coming would hold its own with Hollywood product. The event as it was known in a few minutes justified the prophecy. The medium and long shots were in a uniformly low key lighting. The shots taken nearer the camera were remarkable for brilliance and impressive quality. They were of the sort that get under the skin of the admirer of photographic excellence.

The photography as a standard, as a whole, was dramatic in its effect, in its influence, on the spectator. And then, to be sure, what a subject was Libertad Lamarque, described in one of the Argentine newspapers as the best box office attraction in all Latin countries. Difficult it would be indeed after witnessing her work in this melodramatic tragedy to name her all around equal on the American screen, barring the language handicap. Everything she has in abundance. She is a singer of real quality and stage presence. She has remarkable physical beauty. She has great appeal and sincerity and rare charm, proving her high claim to rank as an actress.

The sound in "Puerta Cerrada" is first class and is credited to R. C. A. The direction and production are of such excellence as to carry a business tip to American producers. There is to be feared in a competitive way in South America for South Americans and for Latins in Europe and the world around a force much greater and of more power than can be created in Germany, under the present regime at least. And the same applies to Italy, the second of the nations moving heaven and earth, so to speak, to break in in the Southern Continent.

We are informed that "Puerta Cerrada" is in the custody of the Foreign Film Exchange of Los Angeles.

On Friday, July 21, the Academy showed "Alas de Mi Patria" ("Wings of My Country"), produced by the same company as was "Puerta Cerrada." It is a dramatization of the history of aviation in Argentina and was directed by Carlos Borcosque, who is known in Hollywood.



# HOW TO IMPROVE YOUR TITLES

By BILL BESBEE

**T**ITLEMaking is one of the most fascinating pastimes connected with amateur movies. The particular satisfaction of this work lies in its creative aspect. The titlemaker has complete control over his results and after a short period of experience can be certain of getting exactly the effect he wants every time.

Good titlemaking is a very satisfying end in itself, and it gives back much for the effort expended. But, more than this, titlemaking has become so much an integral part of amateur movies because good titles will vastly improve any film.

In this role, good titles may take many important parts. They interpret the film to the audience; they speak for the silent actors; they describe far places and distant lands; they state facts and they are the parentheses without which no film may have a fitting opening and closing. This is why titles are important:

To the occasional shooter who wants to make ordinary titles with a minimum of trouble; to the enthusiast who wants every titlemaking facility to try out his pet ideas; to the maker of business or industrial films; to the serious worker; the animator and the scientist.

It is why titlemaking is one of the

most active branches of the amateur movie hobby.

## Best Movie Titler

The best movie title is that which is clear and succinct. Try to put the idea over in as few words as possible. A short title is easier to arrange in a given space, and also has the advantage of being read more easily.

Long, wordy titles take so much time for the audience to absorb that they may delay the action of the picture. Title writing is like creating a newspaper headline—it is the art of saying much in few words.

With a little practice this becomes a relatively easy matter. In any case, too much should not be said in any single title. If an unusually long text is required, several titles may be used, dissolving one into the other.

Titles should stimulate your audience, not merely give them a lot of dry information. Much originality and good taste can be shown by the grouping of title letters and their arrangement in the 3 by 4 unit space of the movie frame.

It is best to group the words together in a compact block of type in or near the center of the title surface, rather than to bring them too close to the edge



Besbee Title Letter set, three-quarter-inch capitals and half-inch lower case letters.

of the frame. This minimizes the effect of any slight errors in centering and also prevents the projector aperture from cutting off the edges of letters.

## Size of Type

Convenience will dictate what size letters to use in any given title area. Within certain limits, if the title is short, the letters may be larger and vice versa. A 3 by 4 inch title can be made with letters  $\frac{1}{4}$  to  $\frac{1}{2}$  inch high, while a 9 by 12 inch title will take  $\frac{3}{4}$  inch or 1 inch letters.

It is recommendable not to fill up a title with too much distracting material.

Next to the making of the actual pictures, titlemaking offers the most fascinating means of working out one's own ideas in home movies. Not only does titlemaking have a satisfaction in itself but also it improves the picture which it accompanies.

With the Besbee Titlemaker, for instance, there is practically no limit to the novel and original ideas that can be worked out because in this outfit there is provided every possible adjustment and accessory the amateur movie-maker needs to make perfectly arranged accurately centered titles.

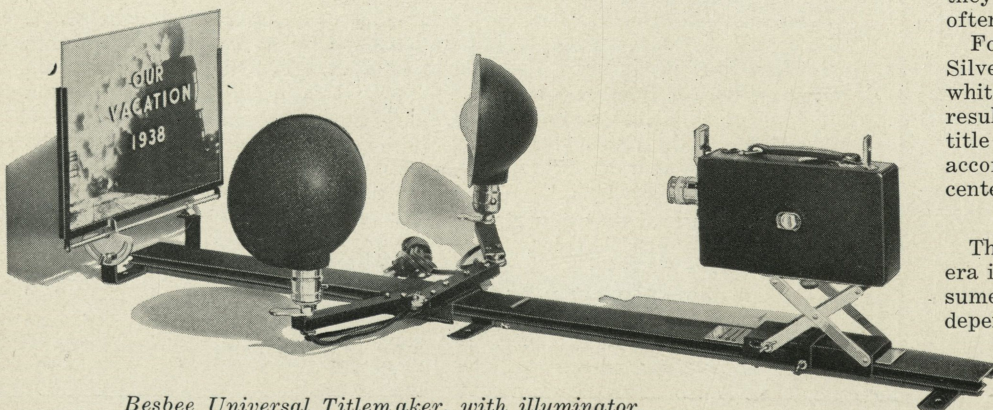
This titlemaker can be used for the simplest hand lettered or typewritten titles, as well as the most carefully planned map, animation, scientific or cartoon work.

The easiest title to make is that built up with Spell-O-Tex Titling Letters. These are die-cut from special composition and are provided with an adhesive backing, so that they will adhere firmly to any smooth surface. After using, they may be removed and used again as often as desired.

For plain titles with reversal film, the Silver Surface letters are best, although white letters may also be used with good results. The letters are arranged on the title background, which should be dark, according to the regular rules for titling, centering and spacing already given.

## Footage of Titles

The lights are turned on and the camera is started running. The footage consumed for any given title will naturally depend upon the length of the title word-



Besbee Universal Titlemaker, with illuminator.



ing. A good general rule is one second a word for all but the shortest words.

Another method is to read the title over twice aloud while the camera is running. The Title Illuminator will be found most convenient for providing an even light on the title surface, although separate lights in reflectors may be used in place of this. Care should be taken to keep the illumination even. The exposure will vary with the type of bulb used and with the line voltage.

Since a small diaphragm opening on the camera lens makes for a sharper title, it is suggested that No. 1 flood bulbs be used in the Title Illuminator with all film except superspeed panchromatic.

The following table will give a working basis for the maker of titles, using black and white reversal film, silver Spell-O-Text letters on a 9 by 12 inch background and two No. 1 flood bulbs:

|  |              |
|--|--------------|
| Slow type, "color blind" reversal film (a very suitable film for title work) ..... | f/3.5        |
| Par speed panchromatic (Agfa pan, DuPont, Gevaert or Eastman Safety) .....         | f/5.6 to f/8 |
| Agfa Plenachrome, Gevaert Ortho .....  | f/5.6        |
| Agfa Hypan .....   | f/8          |
| Supersensitive emulsions..   | f/11-f/16    |
| (When using half speed, use next smaller stop opening in each case.)               |              |

#### Small Title Areas

There are two classes of movie camera lenses in use; those which operate in focusing mounts and those which have fixed focus mounts. For general title-making and for all closeup work the lens in focusing mount is preferable. Most lenses in focusing mounts may be adjusted to focus sharply on distances from 24 inches to 12 inches from the camera.

Owners of cameras with such lenses will find the Titlemaker extremely satisfactory, as, with the normal one inch lens, an area of about 3½ by 4½ inches is included at a distance of one foot and about 7 by 9 inches at a distance of two feet.

The fixed focus one-inch 16mm. lens, on the other hand, is set so that objects from about six feet on to infinity will be satisfactorily sharp. Since the title surface, if shot at six-foot distance,

would be about 28 inches wide, users of fixed focus lenses must employ "portrait" or "closeup" attachments when shooting titles smaller than 24 inches wide, else the title letters will not appear sharp.

It is a well-known fact that the smaller the lens stop the greater the tolerance in focus, hence passable results may sometimes be had with a fixed focus camera by using a very small stop (f/16) and lots of light.

But the most satisfactory method lies in the use of auxiliary lenses which may be had to focus sharply at several standard closeup distances. Using these auxiliary lenses, the area covered will be about the same as given in the supplied adjustment chart for focusing lenses.

#### Direct Positive Method

Those who work with focusing lenses, if they wish to photograph areas smaller than that given at the closest focus of the lens, must also make use of auxiliary lens attachments. The limits of close focus for the taking lens may always be stretched a little by closing down the diaphragm to a small stop.

The method of many direct positive titles provides a most effective way to make use of title cards which are lettered or printed in black on a white or light background. Since such lettering is much more easy to produce on the white card than white lettering on black, the direct positive method is widely used.

The film employed is the regular 16mm. or 8mm. positive, which is available from all larger movie suppliers or film manufacturers. It may be had already wound on a camera spool, ready for use, or may be spooled by the user, as it can be purchased in 400 ft. rolls, in the regular "laboratory packing."

This film is inexpensive and very effective for title work, as it has a contrasty emulsion. It is used in the camera in the regular way, giving an increase of about two stops over the values used for regular reversal pan film. After shooting, the film is not reversed, but developed "straight" in a contrast developer.

This results in a negative image of the original title card, with white letters on a dark ground. The direct positive title is spliced into the regular reversal film with the emulsion facing the same way and will then read correctly on the screen.

#### Moving Background

A most interesting effect may be produced by using an actual moving background for titles. This is done by affixing the letters to the sheet of clear glass supplied, placing the glass in the easel and training the camera on some appropriate scene, which is shot through the glass carrying the title letters.

This effect may best be had by taking the outfit out of doors and setting it up on some firm support. With plenty of light on the title letters themselves, the lens may be stopped down to a point at



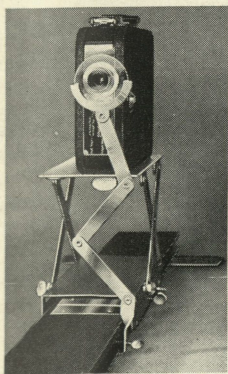
Four attractive titles with Besbee special title backgrounds.

which sufficient depth is given to make the title satisfactorily sharp, as well as the scene beyond.

If a fast film is used, no difficulty will be experienced in stopping down in good bright daylight. The actual moving background should be chosen with the same principles in mind as when selecting still photographic backgrounds.

For those having cameras which will make lap dissolves, a pleasing effect can be had by first shooting the scene with the title, and then by dissolving into the scene without the title, with the camera still in the same position, after which the action proceeds.

Trick titles are one of the most fascinating branches of titling work, because here the imagination of the title maker has full play. This field is so large that it is impossible to cover it in detail in one issue.



Besbee Close-up Adapter.



# GRABBING NIGHT EFFECTS IN DAYTIME

**W**HEN a professional cinematographer has an outdoor night effect scene to make, and one which does not require too many windows being lit up, he makes it in the daytime.

How? By simply using infra-red sensitive film with a 23-A filter.

But unfortunately, not enough of these night effect scenes enter the province of substandard filming to make it worthwhile for any manufacturer to market a 16mm. or 8mm. infra-red reversible film.

Just the same, daytime night effect scenes may be made very successfully by any of us with our eights or sixteens. All that is necessary is to take a leaf from the professional's book.

Speaking first in terms of monochrome cinematography—the thing is still easier in Kodachrome—the secret of putting over an illusion of night lies partly in having a jet-black sky which in itself suggests night, and partly in judicious underexposure.

Before the professional had a dependable infra-red sensitive film available, he made these daytime night effects with his regular panchromatic film and any

one of several filters. The amateur, even if he hasn't the latest developments of infra-red film to use, can follow suit.

The filters most generally used for daytime night effects are the 72, or "Gamma" filter, and a combination, usually built up as a single filter, of the red 23-A and the green 56-B.

## Restricted Use

The amateur can, if he wishes, obtain these same filters in sizes to fit his smaller camera, either from Eastman (Wratten filters), Scheibe or Harrison. But these filters are pretty definitely special purpose affairs, and are of very little use for any other purpose than night effects.

The 72, for instance, is an ultra-deep brownish red filter with a factor of from 20 to 60, depending upon what type of film is being used.

The 23A-56B combination is a somewhat lighter filter, not nearly so reddish in color, and with a factor ranging from about 11 to 18, depending on the emulsion used.

But in most home movie work, night effects come so infrequently that most

of us rather hesitate to tie up two or three useful dollars in a filter of such limited application. But there are other expedients.

For instance, if one has a filter-holder which, like the Harrison and H.C.E. types, permits the use of two glass filters at a time, it is simple enough to improvise your own "combination," using any good red filter such as a 23-A or an F, and any green filter, such as an X-1 or X-2 in combination.

In some cases those who use filters in fixed mounts like the ones supplied for Filmo cameras can achieve an acceptable combination by simply placing a gelatin filter of the desired color, cut out to the right size, between the filter cell and the lens.

In this case, however, it is necessary to be sure the gelatin filter does not get wrinkled as the filter cell is screwed into place.

## Underexposure Does Rest

But even with only an ordinary deep red filter, quite convincing night effects are possible. The red filter, of course, will darken the sky, and to a certain extent overcorrect the rendition of green foliage, etc. Underexposure must do the rest.

This question of exposure is one which cannot be dealt with in the abstract. There are too many varieties of 16mm. and 8mm. film in use, each with a different balance of speed and color sensitivity. Besides, processing conditions vary considerably.

With Eastman film, for instance, the automatic exposure compensating control is such that you must greatly exaggerate the underexposure if you don't want to see your scene unexpectedly transformed into an overfiltered daylight effect.

The best solution is to make one or two tests, which will give you a guide as to exposure in the future. A good starting-point would be using the filter without making any exposure-increase. With a heavy red filter, this should give an effect about sufficient to offset most of the automatic exposure-correction of the processing plants.

But—as the professionals learned long ago—simply pulling down the sky with a filter is only half the secret of good night effects. Lighting plays an equally important part.

## How to Get 'Em

The most convincing effects are secured by composing the scene so that a rather heavy shadow cuts across the immediate foreground, while the middle distance is a blend of sunlight and shadow, and the distance more brightly lighted.

For another thing, while clouds add to the beauty of day effect scenes, they don't necessarily need to be present in a night effect. A few big, fluffy clouds



*Filtered night effect shot in daytime. This still was made on Agfa infra-red. F/4.5, 1/25 second. Courtesy Agfa Motion Picture Topics.*



are all right, but there should also be a generous expanse of jet-black sky. Given his choice between too many clouds or none at all, the professional making a night scene infinitely prefers the cloud-free sky.

If filter and exposure are to darken the sky satisfactorily, the camera should be kept away from the sun—that is, keep the sun behind you or over one shoulder; never pointing the lens directly toward the sun, for the sky is whitish close to the sun, but grows progressively bluer after you have turned 90 degrees away.

In making these night effects there are several things to guard against. For one thing the action of the filter which darkens the sky also tends to lighten any red objects in the scene. It doesn't, as a rule, matter much if a brick building suddenly grows lighter at "night"—but if a pretty girl's face becomes so chalky white, and her lips as well, your night effect won't be so pleasing. The professional can use a special lip makeup for such scenes; but unless you are one of the rather few amateurs who employ makeup, you'd better confine your night effects to long-shots!

#### Have a Care with Red

Red dresses are a similar problem. If you are planning any such night effect scenes insist that the wife or girl-friend wear a dress of any color but red: for if she wears red, she is likely to do as some professional actresses have, and leave an interior scene in a dark dress—only to step outdoors immediately after, wearing an apparently white costume!

Night effects in Kodachrome can be even more effective, and fortunately, they are simpler to make. When the professional cinematographer makes a Technicolor night effect he slips a blue filter on his lens and underexposes. But for once the amateur is head of the game—the Eastman experts have given him a color film with that blue filter already in it!

What, you never heard of it? How about Type A Kodachrome? Did you never make a scene on that film outdoors, forgetting to apply the pinkish filter supplied for using Type A outdoors?

If you have, you know already that without the filter outdoors Type A gives a distinctly bluish, moonlit effect. Now couple that with underexposure a composition that stresses long diagonal shadows, and what have you? A most convincing night effect!

But there's yet one more touch you can add to such scenes. In some cases, this combination of unfiltered Type A and underexposure will still leave you with a sky that is too light and daylit a shade of blue to suit. If that is the case, what is easier than darkening that sky with a pola screen?

*With modern fast films, rainy-day movies are easy—even in the evening or at night. This still was photographed by Charles Waite on Agfa Ultra Speed Pan. 5:30 p.m. F/4.5, 1/20 second.*

# LET'S MAKE MOVIES— IN THE RAIN

**S**O YOU want to make a picture that will lift its head above the commonplace level of ordinary, run-of-the-mill home movies? Well, the easiest way to do that is to turn your camera on some spectacular, out-of-the-ordinary subject. If your picture has something distinctive to say, you won't need the camera technique of a Bill Daniels or a Joe Ruttenberg to make audiences pay attention.

Wait a minute now—who said anything about having to travel to Bali or Timbuctoo in search of unusual subjects? You can find plenty of them right at home—if you keep your eyes open and your camera handy.

All that is necessary is to watch for places and times that you and all your camera-toting friends haven't shot to death. An ordinary place or action, filmed under unusual conditions, automatically becomes an unusual picture.

Now that that's settled, here's some

spectacular camera fodder it is easy to catch almost anywhere at this season. Just wait until the weather reports forecast a bit of rain. Then take your camera and reel off some scenes of familiar things in the rain.

#### Trees in the Rain

One of the most spectacularly beautiful sequences in the 8mm. Kodachrome picture "Trees," with which Preston Piper won third prize in the recent contest of the Orange County (Cal.) 8mm. Club, was made in the rain. The sequence began with a skyward angle shot of the dull green tops of some tall trees against a slaty blue-gray sky, with the light gray streaks of the falling raindrops strongly contrasted against the dark greenery.

From this beginning he went, with more conservative angles, to further shots of trees gleaming moistly in the rain—sometimes apparently at the foot





of an upcurving rainbow, sometimes by a rain sprinkled brook, or beside the glistening ebony surface of a paved highway.

Another film, memorable also for its use of rain as a pictorial asset, was "Moods of Nature," with which Paul Burnford of England some years ago captured a prize in the Cinematographer's International Amateur Movie Contest. Burnford's picture told the simple story of the passing of a storm over a typical bit of countryside—beginning and ending with fair weather, but depicting the storm as the dramatic climax between.

He went into considerably more detail in this presentation than did Piper, of course, for the storm was a more important point in his film's continuity. He began with shots of the storm clouds gathering. Then the wind, rippling the tops of a field of ripening grain.

Next the patter of the first scattered raindrops as they fell into the smooth surface of lake and stream. Finally, the pelting rain itself, lashing the smooth waters almost to a froth.

And in the end, as the storm blew itself away and the sun came out again, the final droplets, effectively back-lighted, as they dripped from the leaves.

#### Broader Scope in City

Both of these films showed the country in the rain. To my mind, modern cities offer even greater possibilities for rainy day filming, and I am amazed that few if any cinemaddicts have turned their attention toward photographing rainy day scenes.

Just think of the possibilities offered for pictorial effect by the broad expanses of glassily wet pavements and sidewalks for reflections of people, buildings, and traffic—to say nothing of the picturesque reflections of auto headlights, traffic signals, street lighting, illuminated signs and shop windows!

And for human interest shots, how about the thousand and one little details as people scurry for cover? Folks rushing blindly along under inadequate umbrellas—others dashing for street cars or trying vainly to flag overworked taxis—and the rare few hardy souls who stride valiantly along umbrellaless, pretending not to notice the downpour?

Then there are the folk who have to be out in the drizzle—the raincoated policeman, in gleaming black rubber, dripping as he directs traffic—the newsboy, coat collar upturned and a bunch of soggy "extras" under his arm—the small shopkeeper hopefully bringing out a rack of umbrellas for a "special sale"! It all adds up to a picture that is distinctively different.

Such a picture could begin, for example, with an insert of a newspaper weather report, forecasting rain. Then a shot of a man at the breakfast table, laying down his paper, going to look out the window, and finding the weather beautiful and clear. With this assurance that the weather man was, as usual, "always wrong," he could sally forth to business, unprotected.

The next sequence could concern itself with the arrival of the promised storm—mounting clouds, increasing breeze, and the like, leading up to the fall of the first few drops. Then we could logically show the effect of the rain on the people, interspersed with the pictorial long shots afforded by the combination of moist, reflective pavements, lights, and so on.

When these have been exhausted several possibilities offer for closing our story. We can bring this central character, whom we have already seen leaving his home contemptuous of weather forecasts and rain gear, home through the storm, thoroughly regretting his carelessness.

Or we can let him work all day indoors, unaware of the rain and—for one of those O. Henry twists—emerge after the storm is over, and return home still blissfully unaware that the weather man was right, after all!

#### Rainy Day Technicalities

Thanks to modern lenses and film, rainy day movie making is much easier than it would have been a few years ago. For black-and-white we now have the asset of really fast films, such as Super-XX, Super-Pellex and Agfa's Supreme negative, to add to the benefits of fast lenses.

Using these fast emulsions during the daylight hours, even the murkiest clouds a rainy day can offer will seldom be dark enough to force us to open the faster lenses to their fullest aperture. And they open up an entirely new range of possibilities for twilight and after dark filming on wet days—most useful, this, since it is at these hours, when auto headlights, advertising signs and store windows are illuminated, that some of the most striking wet-weather shots can be made.

Kodachroming in wet weather calls

for a good bit more if we want a normal exposure, but in many cases the greater effectiveness of color makes the effort worthwhile. During the daylight hours, regular Kodachrome is of course the thing to use.

Despite its relatively slow speed in comparison to such super-speed emulsions as Super-XX, you will still be surprised to find how much you can get in spite of the murky weather. In some cases, as Piper did, you may find it necessary to slow the camera down to 8 frames a second, but in many more cases you'll find normal speed operation adequate.

#### Should Have Meter

At night, and even during the twilight, as the lamps and signs begin to light up, the added speed of Type A Kodachrome, used without a filter, will be a welcome advantage.

Finally, in rainy day filming as in any type of camerawork under unusual conditions, a modern photoelectric exposure meter will prove worth its weight in gold. Normal lighting conditions are deceptive enough, but on rainy days, between the light reflected from sky and headlights by the wet streets, and the diffusion given by the clouds, only by actually measuring the light reaching the camera at each individual set-up can we be sure of correct exposure.

So why not, the next time it rains, load up the trusty camera, carefully protecting its lens with an extra-deep lens shade, and venture forth to get some of the really different pictures wet weather offers?

And when the film is edited you can sit back comfortably in your nice, dry chair beside the projector, and find out, first hand, what it feels like to be one of those lucky fellows people congratulate for making unusual films!

#### Duplicate Transparencies Made from Eastman Color

Duplicate transparencies in color can now be made from most Kodachrome film "stills" and at modest cost, Eastman announces.

Thirty-five-millimeter duplicates, for screen projection, or enlarged duplicate transparencies up to 11 by 14 inches, can be made from original Kodachromes taken with a miniature camera. In addition "same-size" enlarged or reduced-size duplicates can be made from most sizes of professional Kodachrome film transparencies.

Miniature-camera originals may be submitted either mounted or unmounted for duplication.

Thirty-five-millimeter duplicates for projection will be returned in Kodaslide Ready-Mounts, ready for use, unless the order indicates otherwise. If desired, miniature duplicates may be reproduced in sequence on film strips, provided all originals are the same size.

#### Focusing Alignment Gauge

Closeup photography requires compensation for the difference of field shown in the viewfinder and for increased accuracy in focusing.

The new Focusing Alignment Gauge announced by Bell & Howell for use with the Filmo Turret 8 permits the operator to focus exactly, as well as to obtain the exact boundaries of the close-up picture.

Since the Critical Focuser (which is an integral part of the Filmo Turret 8) and the lens in photographing position are exactly parallel, it is only necessary to slide the Focusing Gauge block to the right and revolve the selected lens back into place in order to photograph the picture precisely as focused and framed in the Critical Focuser.

Thus a title card, map or any subject may be sharply focused and accurately composed within the film-frame area and then photographed with complete assurance. The price is \$7.50.



# Plan Your Movies As Well As Your Vacation

By Wm. Stull, A.S.C.



*When a tripod is not used support the camera on any available substitute. Photographed by James A. Sherlock, Sydney, Australia.*

**T**HE other day a cinefilming friend was bursting with enthusiasm over his vacation plans. "I'm going up through Crater Lake and the Rogue River Country," he said; "then along the Columbia River and over to Glacier National Park. From there I head home through Yellowstone and Salt Lake, with a side trip to Boulder Dam. And won't I just have a knockout picture to show the club when I get home!"

For an hour he overflowed with details about that wonderful vacation he'd planned. It seems he spent most of the last six months planning it—poring over guide books and road maps to extract the last mile of thrilling travel from the time and money he had to spend.

Pictures, you could see, were a prime reason for all this elaborate vacation planning. He would cover half a dozen of the most photogenic locations of the West.

But pictures, when you came to analyze his plans, seemed more and more incidental. He was going to places where pictures could be had. He himself was, and is, a mighty capable man at snagging fine compositions with a cinebox.

Pictures, it would seem, must inevitably follow combining the two.

## "Pictures" or . . . a Picture?

Whether or not he will succeed is another matter. It depends upon your idea of a picture. Undoubtedly he will bring back hundreds of feet of pretty pictures. But will he bring back material that can be edited into a coherent motion picture that will interest audiences

It is to be doubted.

He may have spent six months planning where he would go to get his vacation pictures. But he hasn't spent even six minutes planning what he will do with his camera when he gets there! He is leaving entirely to chance the vital matter of what his pictures will be and what they will say.

The result will be roll after roll of photographically beautiful scenes which will give audiences the same impression as a lecturer who speaks at great length in beautiful phrases—but says nothing of importance.

It's easy to argue, as he did, that none of us can forecast today what will

be happening around us six months, six weeks or even six days in the future—that we can't predict that at 9:47 A.M. August 12 a brown bear will cross the road at a predetermined spot in Yellowstone in the right way to give us a perfect cross-lighted shot.

Of course not! But if we're going to Yellowstone we can very easily foretell whether we're going to be interested in filming bears, pot-shotting at geysers, or making a celluloid record of the anglers of our party making a limit catch of trout. And long before we start we can know whether we want our camera to concentrate on wild life, on scenery, or on the activities of our particular party.

## Budgeting Filmic Ideas

Practically all of us are faced with the necessity of budgeting our vacation time and cash. Quite a lot of us carry it a step further and at least make an attempt to budget our vacation film footage.

If the vacation planned is like our friend's, covering a lot of territory, we

*(Continued on Page 374)*



# Plan Your Movies As Well As Your Vacation

(Continued from Page 373)

plan to hold ourselves in check at the less spectacular points so that we will have enough film left really to cover the more important locations.

Why not, then, go the rest of the way and budget our filmic ideas as well? It will save time, film and money—and it will give a more satisfying picture in the final assembly. There will be more

meat and fewer wasted scenes and yawning gaps in continuity.

If we give the matter a little thought we'll find plenty of clues to guide in this filmic planning. First and most important is the audience aimed at. Oh, yes, we're all of us aiming at some audience even in the simplest "home movie"! With some it may be just the

family or the group which makes a vacation trip together. With others, the audience may widen to include friends—camera-minded or otherwise.

Still others may want a picture that will please not only the family and immediate friends, but also a larger group, such as a club. And a rare few other hobbyists—usually those lucky enough to be undertaking some really out-of-the-ordinary vacation venture—can look forward to interesting audiences of total strangers in our films.

Each of these audiences demands a different treatment. The family group may appreciate scenic shots, but if there aren't plenty of characteristic shots (preferably closeups!) of the folks they know, they'll be disappointed.

## Photography First

The average group of friends is less interested in seeing people than in seeing the unfamiliar places you visit.

The club audience usually makes its first requirement good photography—the best you can deliver—but in addition most groups who meet ten or twelve times a year to look at sub-standard movies can quickly get fed up with undiluted pictorialism.

They appreciate good photography used as a vehicle for telling a story—not a scenario, but one that can be summarized as showing that somebody went somewhere, saw such-and-such places and such other (interesting) people doing these interesting things, and then came home.

The general audience wants further particulars about the unusual place you visited, and the people and their activities there. A polynesian raw fish banquet is interesting to them—especially the details of how it was prepared and how the natives eat it; the fact that you and your wife were there is purely incidental, and maybe irritating.

Each of these audiences is really asking you a question when your picture flashes on the screen. The family audience wants to know who was there with you. The friendly audience is a lot more interested in what was done.

The club audience likes a complete story of where you went, embellished, of course, with good photography. The general audience is as a rule most interested in the how of things—how Samoa looks, how the Samoans live, and so on.

## Don't Overlook Family

So if you know the sort of audience most likely to see your picture you have an excellent indication as to the type of scenes deserving the most footage.

If you're shooting for the family, you can ignore a lot of things any less intimate group might demand. If you are hoping to please any wider audience, you can ignore much of the family footage. It would only have to be cut out, anyway.

All of which leads us squarely to tak-

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ing a wallop at a fault that has marred more vacation films than anything save perhaps such elementary technicalities as faulty exposure or panning. This is the inexcusable habit of attempting to compromise with these filmic genres.

Many an otherwise excellent vacation film has suffered (and its audiences with it!) because the hapless fellow who made it didn't have the wit to see he was trying to crowd two pictures into one.

We've all seen them—those nice, general-interest vacation or travel pictures which for no apparent reason suddenly sidetrack their really interesting scenic or pictorial features and bore us stiff with sequences of people we don't know and aren't interested in, doing things (usually silly!) that mean nothing to the picture as an outsider sees it.

Perhaps the total footage of such a film may run only a reel: but wouldn't it be better to have two really interesting half-reel pictures—one for the family, one for outsiders—each of which will really interest its audience, than to have one full reel which is neither fish, flesh nor filmic?

And it only takes a little advance planning—a little budgeting of filmic ideas—to prevent such an occurrence. And if the pursestrings will stand it you'll find it just as easy to plan your shooting so you will have one full reel of family film and an equal footage of general-interest production!

With that sort of planning you can start your vacation certain that you'll return with a picture that will really please your audience!

### Tri-City Cinema Club

The Tri-City Cinema Club, composed of amateurs living in Davenport, Iowa, and Rock Island and Moline, Ill., elected officers for the following year at a meeting June 27 at the People's Power Company Auditorium in Rock Island.

Dr. James Dunn of Davenport was chosen president. Other officers were:

First vice president, W. W. Brubaker, Davenport; second vice president, H. J. Lytle, Davenport; secretary-treasurer, Dr. Albert N. Mueller, Rock Island.

The board of trustees is composed of Dr. Paul White of Davenport, W. L. Langwith of Davenport, and C. R. Crakes of Moline.

The meeting was the first anniversary of the club. The organization has a paid-up membership of 69.

Following the business session there was a projection of movies made at the May meeting and of the 16mm. color film "Return Trip from South America," by Mr. Langwith.

### Northwest Passage Crew

M-G-M Studio has sent to the Idaho location on its "Northwest Passage" Sid Wagner, A.S.C., and Jack Smith, A.S.C. For the Technicolor company William Skall, A.S.C., and Charles P. Boyle, A.S.C., have been assigned.

## Producer of Educationals Bids for Amateur Material

Stillfilm Inc., 4703 West Pico Boulevard, Los Angeles, invites amateurs making 16mm. or 35mm. educational film of marketable standard to write and tell about it. They warn not to send film first.

"Amateur photographers who have short negatives on animals, birds, travel, trains, ships, etc., anything from 25 feet up that can be included as part of a complete reel, or even those who have more footage that would make good educational material, are invited to drop us a

line, giving particulars as to contents, but not to send films until requested," declares A. F. Wilson, manager of the motion picture department.

"In other words," continues the letter, "we will purchase good negatives either 16mm. or 35mm. that we can use in the assembling of certain educational sub-jects."

### Hoefner in Larger Quarters

Fred Hoefner, who for years has conducted a studio machine shop at 5319 Santa Monica Boulevard, Hollywood, is now situated in new and larger quarters at 915 North La Cienega Boulevard.



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## Baumann Passes

Anton F. Baumann, all his adult life a member of the staff of E. Leitz, Inc., met his death in making a picture while trying to secure a "different" angle from a high position. He had just completed a lecture and demonstration tour of a number of Southern cities.

Baumann entered the employ of the firm of Ernest Leitz as a young boy, being engaged in the research department. When the Leica was introduced he at once realized its possibilities and soon devoted all of his activities in making pictures and lecturing on Leica technique throughout the world.

When color films appeared Baumann devoted much of his time to it. He projected his slides to audiences throughout the country and inspired many photographers to work with this new medium.

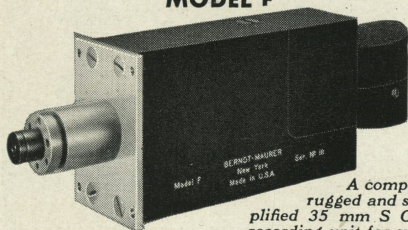


Anton F. Baumann

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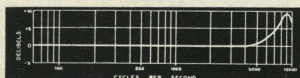
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## Process Shots

(Continued from Page 366)

In many instances, as Haskin points out, it could be possible to decenter the light beams deliberately, illuminating one print most strongly at the center, the second at, say, the right side, and the third at the left side, effectively spreading the "hot spot" over virtually the whole picture area.

### Wider Control

The same principle introduces a completely new range of control potentialities. It becomes entirely feasible and often desirable to vary the intensities of the three arcs individually, balancing the total output to the needs of the scene.

An even more flexible means of control is by using background prints of

several different densities to control not only screen brightness, but also contrast, gradation and shadow illumination in the projected image.

This control can be compared only to the wider control possible in balancing three-color prints as compared to the more limited printing control familiar in monochrome.

That the principle of triple process projection extends not only the physical scope of the projected background process but also the quality of the results obtained, has been amply proved by the large number of important productions both in monochrome and natural color which have been made with these equipments.

Warner Brothers' notable Technicolor productions, including "Gold Is Where You Find It," "God's Country and the Woman," "Heart of the North," "Robin Hood" and "Dodge City" owe much to the triple process projector.

Among the outstanding productions upon which Paramount has made use of its triple projection equipment may be mentioned "Spawn of the North," "Union Pacific," "Say It in French," "Artists and Models," "Geronimo," "Man About Town," "Ruler of the Seas," "The Light that Failed" and "Beau Geste" in black and white, and "Men with Wings" and at least three currently shooting Technicolor productions, including "Dr. Cyclops," in color.

Several of these could scarcely have been made without the added scope and flexibility of the triple process system. All are examples of improved quality difficult or impossible of attainment by conventional methods.

### Future Advances Seen

It will be seen, therefore, that the introduction of the triple-head process projector not only advances the physical scope of projection process cinematography in black and white and in color, but also tends to improve the quality of results obtainable on process shots of more routine scope by increasing the possibilities of control, and minimizing or eliminating disadvantages heretofore accepted as inevitable, and making the composite result more convincing.

As such the new device becomes not merely a technical but an economic asset to the industry.

Cinematographers Edouart and Haskin and their staffs are therefore to be congratulated not only on the ingenuity shown in solving their immediate problems, but in giving to the industry a means of gaining greater advantage from a process which has within a short space of years become one of its most vital tools.

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## Jack Guerin in East

Jack Guerin, A.S.C., head of the technical department for 35mm. film for Gav-aert, left the West Coast July 9 for the East. He will be away several weeks.



# Imagination Enhances Photographic Values

*By Bess Foster Smith*

We have heard a great deal about creative art, music, and creative literature, but so far as I have seen practically nothing much has been said about creative photography. Perhaps this is because photography is supposed only to reproduce what already exists and does not therefore really create anything.

Believing this, we do not attempt anything with creative values in our pictures. This idea was more nearly true in the early days of still pictures—the kind you find in the old family album.

Today, with so many picture contests and picture magazines, picture takers have become more artful. Moving pictures furnish one of the very best mediums for creative art and should rank along with good literature and music.

A wrong definition for creative art is probably much to blame for our wrong thinking in regard to photography. We have supposed that the creating went on in the mind of the artist or composer while he made up his picture, music, or poem out of whole cloth.

This is not necessarily true. The thing that does matter is, that he put something into his picture, poem or music that appeals to the imagination of his admirers and thus creates in those minds, through effects, much more than is actually expressed.

In other words the creating in creative art is in the processes of the minds of the "looker-oners" because of some clever twist of the wrist on the part of the artist.

## Touch of Real Artist

The picture which appeared on the cover of the Saturday Evening Post nearly a year ago was only a shaggy little dog with cocked head standing outside of the closed schoolhouse door. Yet it put a whole story into the minds of every one who saw it.

One visualized not only the little master inside but felt the loneliness of both the dog and boy, and even conjured up past experiences on the subject. So as each interpreted the picture in his own version he was creating from the effect given by the artist.

With this interpretation of creative art it is easy to see how one can en-

hance the appeal of their movies by trying to cultivate the practice of putting these effects into practice on to their film.

Professional movies are well aware of this. You often say of yourself that the greater the actor the less actual acting he seems to do. Of your favorite star you will say, "He didn't really do anything. It was just a little twist of the mouth or some gesture that appealed to me."

Other actors may go through fire and water and you are not moved to tears.

A good way to become mindful of creative atmosphere is to watch for these effects in the next moving picture you see instead of letting yourself be carried away with the picture.

Study what the actors actually do. Then in your own mind determine how your conception of what they portrayed squared with what the scene actually showed.

## Incident, Mood, Character

Now for the amateur moviemaker the creative atmosphere can be cultivated in the following manner. For classification we might divide effects into three classes, although in reality they always are interwoven.

(1) The effects of incident. These will stimulate the mind to create action not portrayed on the screen. For an example, a wrecked car, with liquor bottles strewn about, tells a sad story.

(2) The effects of mood; an example of this is the man trying to telephone the police and holding a gun on a burglar. His mood is shown by the fact that he points the phone at the burglar and holds the gun to his ear.

(3) The effect of character; girl in lounging pajamas smoking a cigarette while mother washes the dishes.

For these examples picked at random (you will soon notice more striking ones) we judge life and we interpret art as some phase of life.

In taking pictures of scenes strive for effects that will bring a feeling of peacefulness, grandeur, storm, hominess, loneliness—or romance—to bring out moods. In picturing persons try to get the moods or character as portrayed in some action.

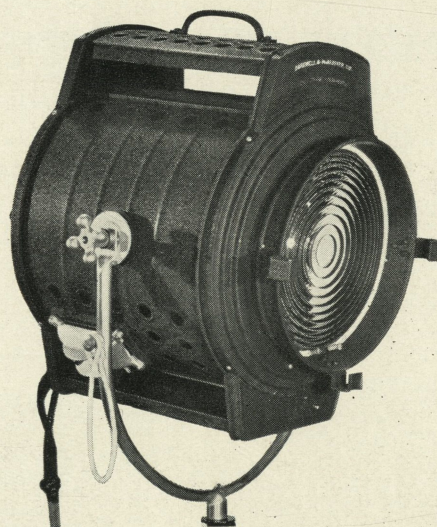
In getting news or incident, try to get pictures that will show the reason or cause of the incident. When trying to stage or make a story of your home movie your ability to catch these effects will be the all important thing.

When we keep in mind these creative appeals, photography rises from its original purpose to the most creative of all the arts. It involves one of the most important principles of education: that is, that one likes and retains what he thinks out for himself, but dislikes to be preached to.

Pictures, like music, can teach in this subtle way, and like all the other arts become a great factor in shaping life.

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# COLUMBIA TELLS OF CAMERA BY BROADCAST

**T**HE Columbia Broadcasting System, from its studio in Hollywood, each Monday night at 9:30 to 9:45 broadcasts under the title of "Columbia's Camera Club." The leader of the club is Maurie Webster, described as its president, who reports that in the nine

months the program has been on the air some 5500 persons have made written application to the studio to be recorded as members of the club.

As guest speakers some of the most prominent photographic authorities on the West Coast have appeared with Mr.

Webster and discussed photographic subjects and given advice and help to listeners-in. Reached at each broadcast is the studio's west coast network.

The president notes a definite growing interest in the work being sponsored by the club, one of the chief aims of which is to extend help to the expanding mass of photographic new-comers.

Each broadcast there is present one or more persons of achievement in the field of photography or of persons who have achieved in other fields and are photographic addicts. Each Monday night, too, a resume is given of the best letters received during the preceding week which pass along to the listeners-in the experiences of the writers in the domain of gadgets or the more general field of camera and darkroom.

At the beginning of an interesting broadcast Mr. Webster described and with captivating interest a picture he had looked upon during the preceding week, a picture the photographic sponsor of which remained unidentified. But let Mr. Webster describe the subject in his own words:

## Covers Lot of Ground

"Two nights ago I made a tour of the west coast. Yes, that's right, in thirty minutes, I saw more beautiful sights from Puget Sound to Death Valley than I ever dreamed existed.

"I explored the national parks and saw unusual, out-of-the-way scenes that thrilled me more than any travelogue I've ever attended. And all this because Hal, a friend of mine who bought a movie camera two years ago, set out to keep a record of the trips he made.

"His movie—in full color—was a grand example of what to do with travel pictures. He opened with a shot of his

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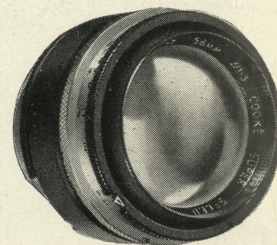
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wife in an easy chair, reading a book about adventure in the outdoors.

"With a homemade dolly, which he'd constructed from a small platform and some heavy castors, he moved the camera in closer, until you saw a picture of a beautiful mountain scene in the book.

"The next shot looked as if it had been made in the same location. There was his wife in hiking clothes, climbing a trail to a stream where she paused for a drink of water. He identified the location with a closeup of a trail sign pointing to Bridal Veil Falls in Yosemite National Park. Then we saw their campsite in the valley, the laughing vacationists in Camp Curry.

#### Reflected Thrill

"Everywhere there were people to keep the picture interesting, while the glorious blues and greens and reds of the mountains and sky gave a thrill nearly as great as actually being there.

"In Washington Hal visited Mount Rainier with its lovely Paradise Valley. Luck was with him and he came back with several feet of film showing a waddling bear cub exploring the contents of their lunchbox. What the film missed, though, was the appearance of the mother bear just as Hal was about to eject the baby bear from the food supply. Nothing serious happened, that is, not much.

"Another picturesque stop was Pyramid Lake, in Nevada, where Hal assures me fifty pound trout are not at all unusual. And since he reinforced his story with a color shot of one as he pulled it out of the water I'm inclined to believe him.

"One of the most interesting bits of the film showed their trip by pack train up the side of rugged old Mount Whitney—accessible today as never before.

Hal caught the action of their guides in loading the equipment on the pack mules.

"He had a striking shot of the train, looking down on them as they came around a horseshoe turn. Another time he followed them as they climbed up the crest of a rocky ridge, silhouetted against the deep blue of the sky.

#### Real Elevation

"But the crowning achievement of that trip was a never-to-be-forgotten panorama, which he shot while perched on the crags, nearly fourteen thousand feet up. From the cathedral-spired dome of Mount Whitney, highest point in the United States, he slowly swung the camera around, glimpsing the peaks of the neighboring ranges, and finally looking afar off to the Salton Sea, a hundred miles away but clear and distinct through the mountain air, 280 feet below sea level.

"During the entire film Hal made use of the little tricks that mean so much to good home movies. Whenever possible he included objects in the foreground to give depth to his landscapes. He had people in his pictures, but they were always doing something that seemed to fit in with the surroundings. The action wasn't stiff and obviously planned.

"There were hiking, fishing, driving,

camping, all the things that spell outdoor fun. There were signs and well planned shots, that made the use of titles unnecessary. The entire film told a story—a tale of adventure right here in the Western part of our United States, of exploration into little known spots—unusual curiosities that really surprised me. Is it any wonder that I hauled out the maps and travel folders yesterday and started planning a camera vacation for this summer?"

#### New Viewfinder Objective

A new two-inch viewfinder objective for use with available two-inch telephoto lenses is announced by Bell and Howell for use in the Filmo Aristocrat Turret 8 movie camera. The two-inch lenses with the new viewfinder objective permit 8mm. film users to shoot distant scenes, recording images sixteen times as large as with the regular half-inch lens.

The new two-inch finder objective for the Turret 8 is priced at \$5.50.

Of the 1506 motion pictures imported into Ireland last year, American pictures accounted for 82 percent, British pictures 17 percent, with the remaining 1 percent made up of German, French and Irish films.

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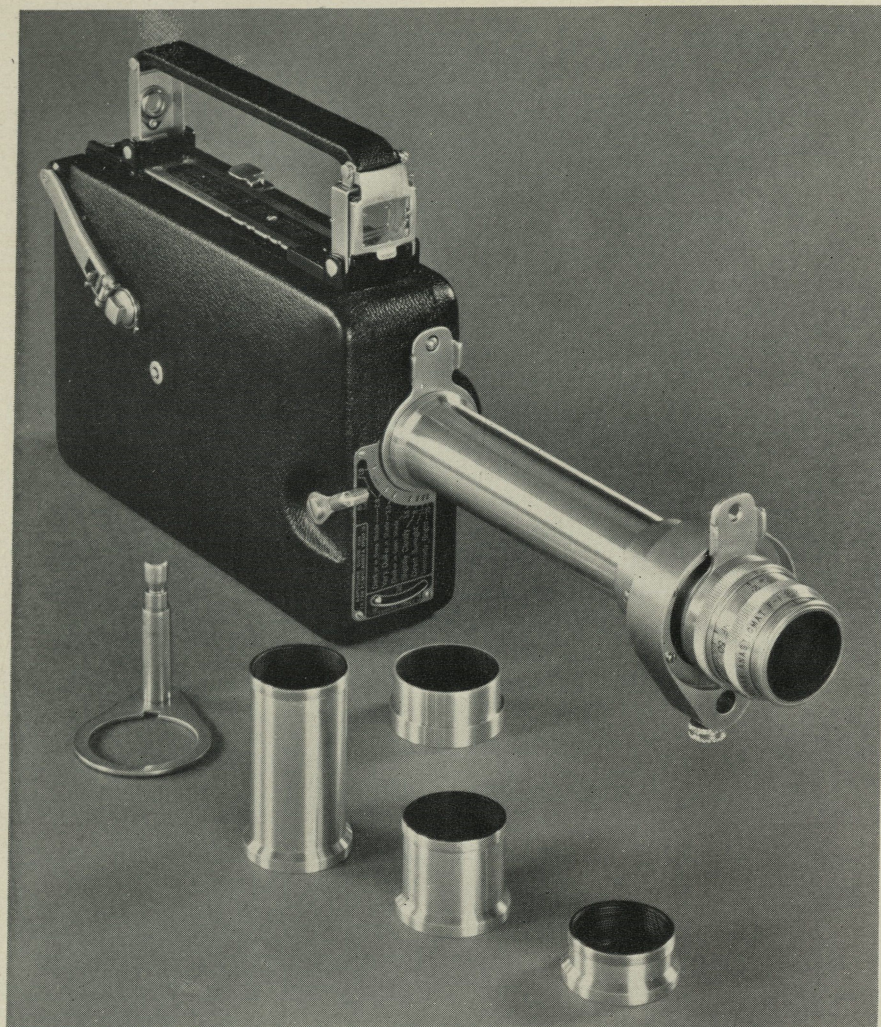
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The new lens extension tube outfit adds range and versatility to the Magazine Cine-Kodak, with which it is pictured here. Tube kit includes four tubes, and supplementary fittings as shown.



### Opens New Filming Fields for Cine-Kodak Magazines

New fields in small-object photography are opened up for Magazine Cine-Kodak owners by a set of lens extension tubes for this camera, just announced by Eastman.

The tubes may be used singly, to obtain extra extension of  $\frac{1}{2}$ , 1, 2 or 4 inches, or fitted together to obtain a maximum added extension of  $7\frac{1}{2}$  inches. With all tubes used together, the standard 1-inch f.1.9 lens covers a field about  $\frac{3}{64}$  inch wide.

By means of the extension tube kit, tiny objects can be pictured several times actual size on the film—and on the screen they appear enlarged hundreds of

times. In addition to the 1-inch f.1.9 any accessory lens for the camera fits the lens tube adapter.

Retail price of the tube kit, including instructions and exposure tables for use of the outfit with black and white film and Kodachrome, is \$27.50. The tubes must be used with the focusing finder for the Magazine Cine-Kodak.

### New B & H Lens Attachment

For some time the wide-angle lens has been an accessory much demanded for 8mm. Filmo cameras. Responding to this demand Bell and Howell now announces the Hyper Cinor lens attachment which serves two valuable purposes. It doubles the lens angle, so that the area photographed is twice as wide and twice as high as that of the lens used without it. Also, it includes provision for focusing. When normal use of the lens is desired the attachment is unscrewed and removed with a few quick turns.

An example of use: When using the normal lens the camera must be about twenty feet away to photograph a person six feet in height. With the Hyper Cinor lens attachment in place the camera need be only half as far away.

### Central Camera's Catalogue

The Central Camera Company, 230 South Wabash avenue, Chicago, has issued its Photographic Almanac for 1939. It consists of 258 pages and covers and is fully illustrated. The pages are approximately 6 by 9 inches. It does not seem possible that there is any essential photographic item unrepresented in all these pages, and probably there is not. It is surely a complete book.

### New RCA Catalog

An attractive 56-page catalog containing a complete listing of all RCA sound equipment for a wide variety of applications in the industrial, entertainment and educational fields has been announced by the Commercial Sound Section of the RCA Manufacturing Company.

All items in the extensive line of RCA sound equipment are indexed and cataloged with photographs, prices, specifications and general descriptions including possible uses. In addition, a compact guide for prospective buyers is included in an easy-to-read chart of six basic sound systems which, with extra equipment for special requirements, cover every standard application.

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NON HALATION

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## Cinema Club of San Francisco

The regular monthly meeting of the Cinema Club of San Francisco was held Tuesday evening, June 18 at 1355 Market street.

By way of entertainment a showing of the 16mm. Kodachrome sound film "Vacation Adventureland" had been arranged through the courtesy of the Great Northern Railroad.

Club member Robert McCollister talked on his recent trip through some of the Los Angeles movie equipment manufacturing plants with a demonstration of pieces of new equipment.

There was also a showing of a 16mm. Kodachrome film on the subject of the manufacture of a pair of spectacles.

DENIS DONOHUE, President.

## New Focusing Finder

Slipped into the Filmo 141 motion picture camera in place of the film magazine, a direct focusing finder announced by Bell and Howell permits both precise visual focusing and accurate framing of any subject, near or far, through any photographic lens.

The image on the ground glass is up-

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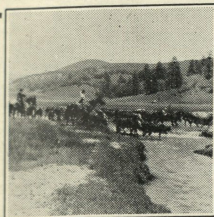
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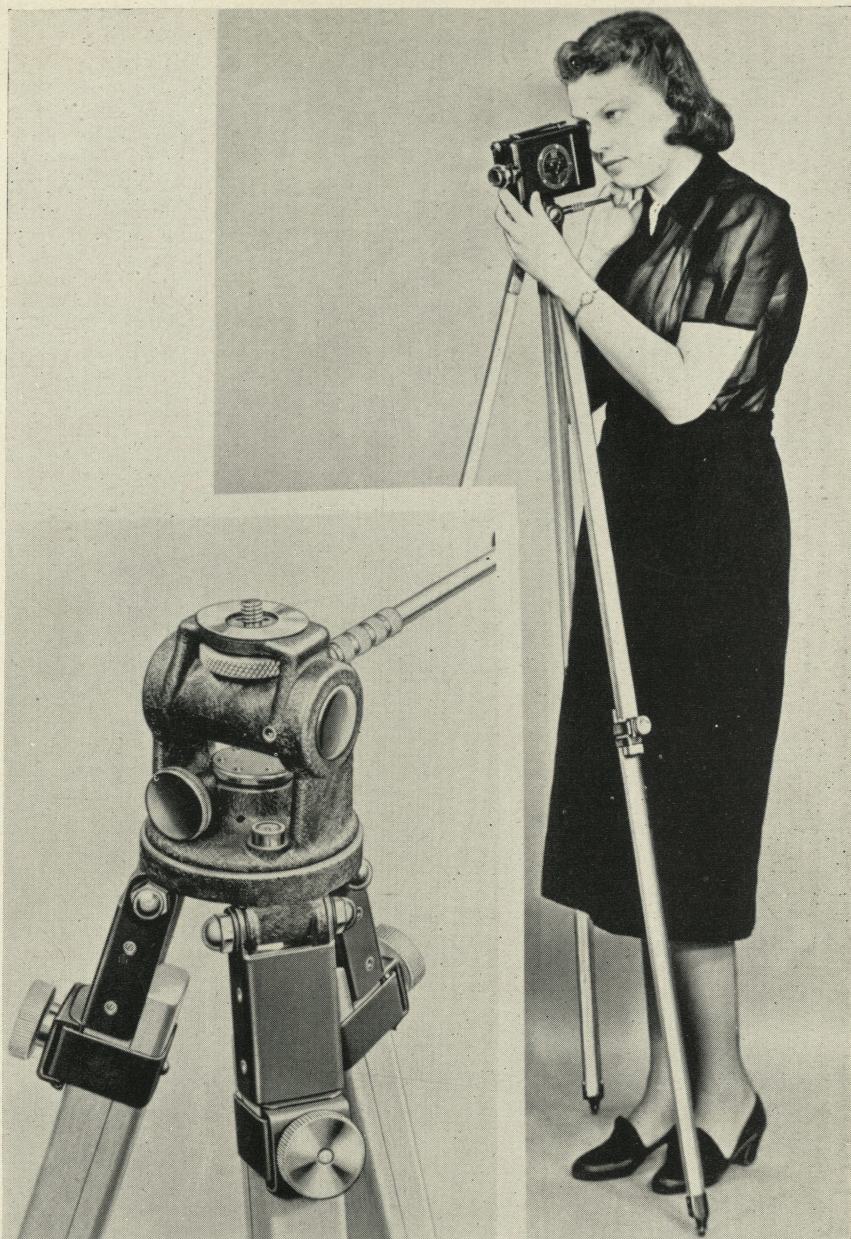
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**\$1.50** PER 100 FOOT ROLL, plus 10c a roll handling charge. Min. 2 rolls at this low price. Cost includes machine processing, spooling, mailing. Fits all 100 ft. cameras, wound on 100 ft. daylight loading spools. 1/3 cash with COD orders. California buyers include sales tax.

**HOLLYWOODLAND STUDIOS**  
South Gate California



right, and is magnified ten times so that no adjustment in magnifying power is needed for critical work. This new focusing finder is particularly valuable for closeups, small objects, titles, maps and animated cartoons when using the Filmo 141 magazine loading camera.

Since the 141 Camera may be reloaded while it is firmly mounted on a tripod, it follows that the focusing finder also may be used without removing the camera from the tripod head.

*New Bell & Howell lightweight Tru-Pan Tripod, fitted with stand and B.&H. pan-and-tilt head (inset).*

## Bell and Howell Issuing Tru-Pan Tripod for 8mm.

Although priced in keeping with the popular economy of 8mm. moviemaking, the new Tru-Pan Tripod, announced by Bell and Howell as designed especially for 8mm. moviemakers, is said to provide the all-around utility of the more costly all-metal tripods.

The smoothly operating pan-and-tilt head is the same as that employed on the Bell and Howell All-Metal Tripod. The cost-saving is in the two-section, selected hardwood legs which are strong and rigid, and may be adjusted to many different lengths. Both pan and tilt may be operated or locked independently.

**8 Enlarged TO 16 TO 8 Reduced**

**Geo. W. Colburn Laboratory**  
Special Motion Picture Printing  
1197 MERCHANDISE MART  
CHICAGO



## Documentary No. 1

(Continued from Page 343)

tops in the memory of this writer: that one in which Renee Adoree follows the lorry and struggles as she tries to clamber aboard; and loses out. What she might have done with that sequence had she been given the added pull of sound is hard to foretell.

To demonstrate what sound brought to the screen the editors chose Paul Muni in a sequence of "Zola." It is near the end of the story, that point wherein Zola lays in the balance all he may have achieved in forty years that Dreyfus is innocent.

In a press book issued by the March of Time we find the statement: "These scenes, recreating today the performances of famous actors, were painstakingly chosen by the editors of the March of Time after months of research in the Film Library of the Museum of Modern Art in New York."

The editors have chosen wisely and deserve the applause and the gratitude of those who have been nearest to the events that have been so impartially reviewed.

**S**TOPPING off in Hollywood on his way home to Chicago from a visit to San Francisco, William C. DeVry, son of Herman A. DeVry, motion picture equipment manufacturer, took occasion to meet various film heads and cameramen using DeVry products. He arrived at the time as a new line of motion picture equipment, including 35mm. and 16mm. sound cameras, the new 16mm. heavy duty arc lamp sound projector as well as a 16mm. single case sound projector and a new 35mm. De Luxe theatre projector.

The equipment is on display at the new and larger DeVry Hollywood branch office at 5628 Hollywood Boulevard. The DeVry Corporation announces it will release in the near future a series of educational sound film, it having recently acquired the rights to three million feet of institutional film.

The company also is preparing to introduce this fall two major motion picture equipments.

### Minneapolis Cine Club

The officers for 1939-40 of the Minneapolis Cine Club are: President, Harold Bronson; first vice president, Ed Johnson; second vice president, Dr. Len Martin; secretary, Dr. Reinhold Ericson; treasurer, Fred Grabow; social chairman, Ray Kullberg. Executive Board, Harold Bronson, Dr. R. M. Ericson, W. R. Everett, Ed Johnson, Dr. Leonard Martin, Leslie Olsen, Carroll Davidson, F. C. Grabow, Carroll K. Michener. Editor Cine Clubber, Rome A. Riebeth.

### New York 8mm.

The June meeting of the New York 8mm. Club continued the policy of screening outstanding films in both 8mm. and

16mm. and featured two 16mm. prize winners: T. J. Courtney's "Riches from the Sea" and Fred C. Ells' "Still Waters." The club interchange feature was the 400-foot 8mm. film "Youth," by A. O. Jensen of the Seattle 8s.

New York member Vincent McGarrett presented a talk on "Filters," illustrated by cut-out cards to show the effect of putting a filter before an emulsion with stated color sensitivities.

The meeting concluded with the showing of "The Clock Strikes 12," by Member Silverman. Visitors to the New York Fair are invited to attend the meetings.

VINCENT MCGARRETT.

## Introduction to Movie Making

(Continued from Page 362)

much of your time and footage. While some folks don't give a hang for shooting buildings or market scenes, there are others who have developed a genuine fondness for recording different types of architecture or close-upping people found in foreign countries.

### One Thing At a Time

My hankering happens to be toward filming wildlife and travel and shooting action stuff on hunting and fishing, neither of which sports I guess I am much good at.

I get a bad case of buck-fever-itis every time a mallard comes over, and I usually spend the rest of my time wrestling with backlashes or picking trout flies out of droopy willows.

Maybe it is just as well, because I have found that it is pretty hard to shoot movies and enjoy your favorite

sport all at the same time. One or the other is bound to suffer.

If you want to make a golf movie, take along a tripod instead of your clubs, and spend your moments framing nice scenic along the fairway or close-upping the excellent putting of your golfing pals.

Dope out the continuity or work up a scenario well in advance, and adapt it to conditions as they present themselves. As a result, your finished product will hold far greater pleasure for future audiences than just a straight camera record of the day's game.

As your film library begins to grow, look for novel ways of editing and titling your odds and ends footage. To increase the enjoyment of home movies, try synchronizing reels to appropriate music and sound effects.

Recordings may be had to express every picture mood, and sound discs are available varying from the crackle of burning wood to the bellowing of a steamer whistle.

Actually, with music and sound properly synchronized, it is possible to create effects even more realistic than if you were filming with a sound track camera right out on location.

### Two RCA Men Promoted

Appointment of Fred W. Wentker as assistant Photophone division manager and of W. L. Jones as national service manager has been announced by the RCA Manufacturing Company. Wentker was formerly assistant manager of the service division, while Jones has been in charge of RCA Photophone service activities.

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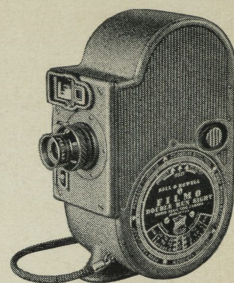
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As the T-H 12½ mm. F 2.5 lens diaphragm closes fully, cameras using this lens are ready for making laps, dissolves, etc., when the new units are added. However, a unit for fading in or out automatically with various lenses will be available soon.

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Now is the time to get your Filmo. Prices are lower, and there's no better season to begin. Bell & Howell Company, Chicago; New York; Hollywood; London. *Established 1907.*



## NEW *Filmo* TURRET 8

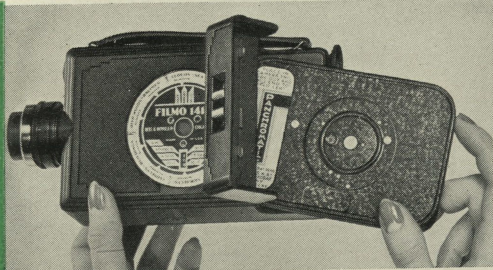
**Gives You 8 mm. Economy Plus Instant Readiness for Every Movie Shot.** The new Filmo Turret 8 mounts three lenses and matching finder units on a revolving turret. When a lens is in position, its viewfinder is, too.

An exclusive "positive" viewfinder shows a magnified, sharply outlined image of the field which will appear on the screen—and it is *exact* even if you fail to center your eye at the eyepiece. Straight-through-the-lens critical focuser, four speeds including slow motion, single-frame exposure, automatically reset footage dial, and complete exposure guide are other features. See the Filmo Turret 8 at your dealer's.

With 12½ mm. F 2.5 lens, only \$140.

Illustration above shows new film rewinding button, described at left, above, which is extra, optional equipment.

### NEW "Shelloading" 16 mm. *Filmo 141*



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Filmo 141 is a superb new 16 mm. camera designed for those who want the best. It operates almost automatically, prevents common mistakes, and provides the versatility you've been looking for.

Filmo 141 has four speeds, including slow motion, and single-frame exposure. Its lens and finder objective unit are instantly interchangeable with a full range of telephoto, wide angle, and speed lenses and matching finders.

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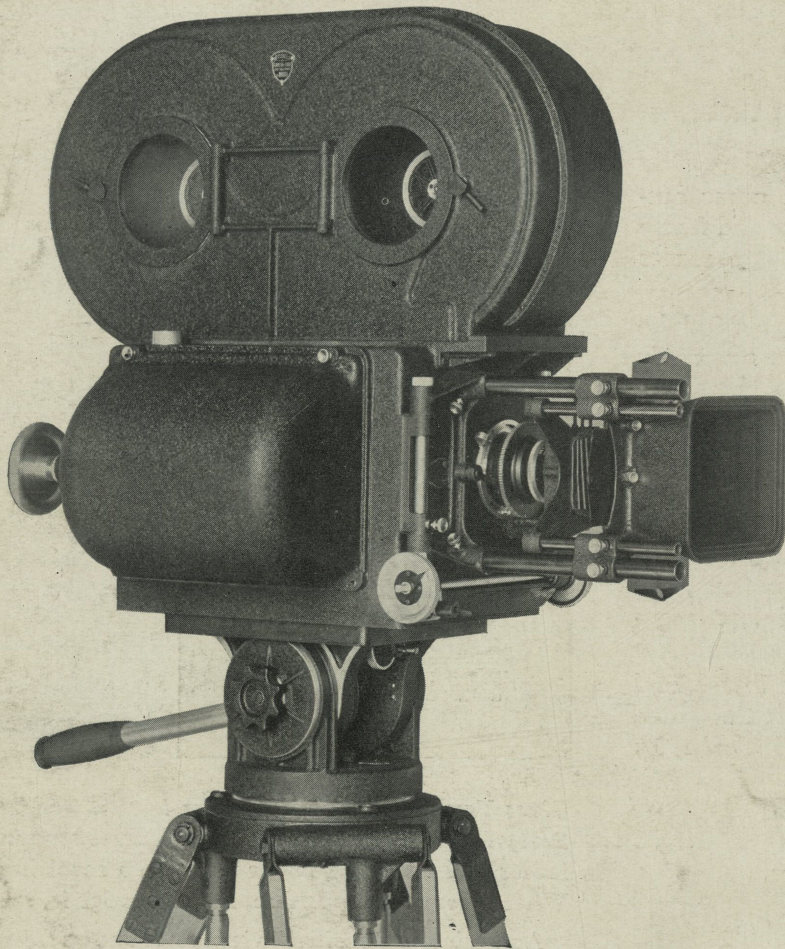
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